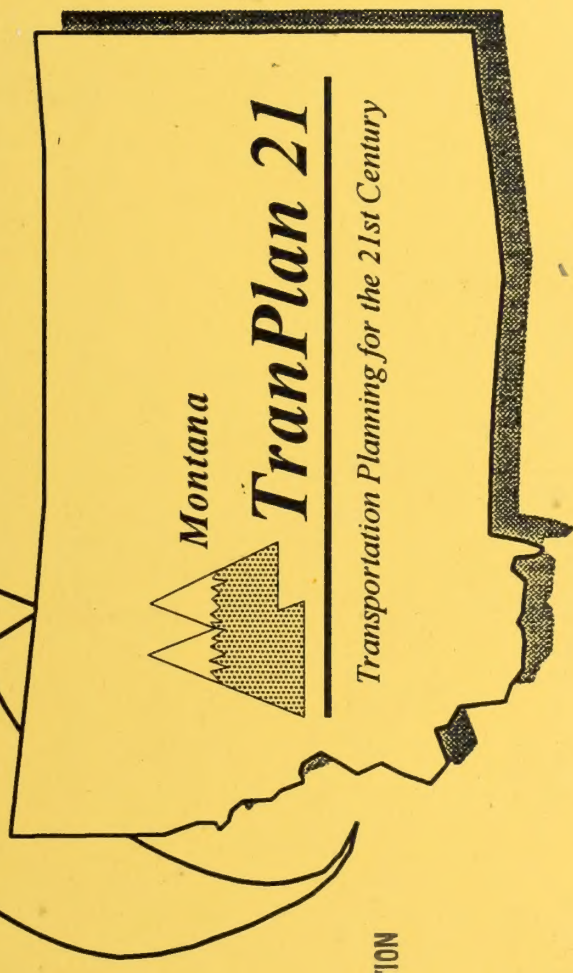


# TranPlan 21 Overview

## Policy Goals and Actions



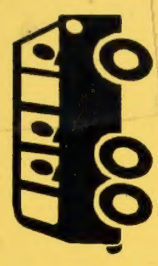
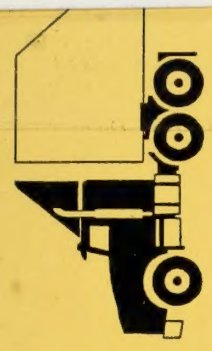
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December 1994

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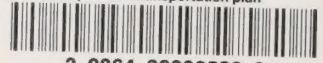


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Transportation Planning Division  
Montana Department of Transportation  
in cooperation with  
USDOT

Prepared by:  
DYE MANAGEMENT GROUP, INC.






# TranPlan 21 Overview

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# Introduction to TranPlan 21

TranPlan 21 is Montana's first statewide multimodal transportation plan. The plan is an important undertaking, it has identified the most pressing transportation issues facing Montana, evaluated future transportation concerns, and established the policy goals and actions that will guide the state's transportation system into the 21st century.

The intent of TranPlan 21 is to avoid planning by "wish list", through establishing a clear set of policy goals and priorities for addressing statewide transportation needs, based upon the funding levels that Montana can afford. To identify needs, establish goals, and priorities has involved careful technical analysis, policy deliberation, and the active involvement of transportation providers and users throughout Montana.

TranPlan 21 is presented in four volumes:

- Volume I: TranPlan 21 Overview - Policy Goals and Actions.
- Volume II: Transportation System Analysis.
- Volume III: TranPlan 21 Policy Papers.
- Volume IV: Citizen and Stakeholder Issues and Priorities.

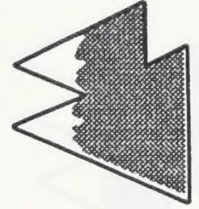
## Contents

This volume provides:

- **A description of the TranPlan 21 process.** TranPlan 21 established a continuing planning process that has involved many Montanans. The planning process involved transportation providers and users throughout the state in setting policy direction and prioritizing actions for managing and developing the transportation system.

Through TranPlan 21, the Montana Department of Transportation (MDT) worked hand-in-hand with its customers - the citizens of Montana to identify and address the issues that are important to Montanans: ensuring mobility, using public money wisely, economic development, protecting the environment, and maintaining the special quality-of-life that we enjoy as Montanans.

- **An overview of Montana's transportation system today.** Because sound planning is essential to building an efficient and well functioning system, TranPlan 21 carefully identified the different elements





of Montana's multimodal transportation system, their current use, conditions, and the key planning issues to be addressed.

**An assessment of the changes we must plan for.** Over the past twenty years there have been vast changes affecting transportation in Montana and throughout the nation. So that we can plan for them, we have assessed the economic, social, and transportation changes we can anticipate over the next twenty years.

**A description of the future transportation system we will plan for.** TranPlan 21 establishes our preferred future transportation system and the policy goals that aim to move Montana towards this future. The preferred future describes the overall objectives for the state in managing and developing the transportation system.

**Policy goals and actions.** Policy goals and actions are presented that define the state's priorities and role in all modes. TranPlan 21 places great emphasis on ensuring that policy goals are tied to actions which can be implemented. Practical steps, roles and responsibilities that address transportation needs are outlined.

**Financing the transportation system.** Montana's largest public asset is its transportation system. The maintenance, preservation, and development of this system is financed through user fees levied by Montana and funds from the federal government. TranPlan 21 recognizes that Montana must plan for a transportation system that it can finance. Available revenues, programs, and funding constraints are described.

### Further reference

The following volumes are available as further reference:

- Volume II: Transportation System Analysis.** This volume analyses the economic, social, and environmental futures that we must plan for. It defines the statewide multimodal system and evaluates current and future conditions for each mode.
- Volume III: TranPlan 21 Policy Papers.** This volume includes the six adopted policy papers.
- Volume IV: Citizen and Stakeholder Issues and Priorities.** This volume presents the results from the public and stakeholder involvement process. The volume describes Montanans' transportation issues and priorities.





TranPlan 21 represents a new approach to transportation planning. It is providing the vehicle for implementing the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) in Montana. ISTEA places new emphasis on transportation planning activities at both the state and Metropolitan Planning Organization levels. For the first time, there is a federal requirement for a statewide planning process. The mandate, the process and the technical approach are described.

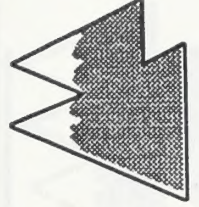
## Mandate

The mandate is to establish a clear link between policy goals, planning evaluation, and the investment decisions that are made. Put simply, transportation investments are to be made based upon an assessment of the most cost effective means of meeting mobility needs. Careful planning and sound evaluation will guide decision making. To do this, Montana is required to prepare a 20-year, long-range plan that takes 23 transportation planning factors into consideration.

These factors reinforce the link between policy goals and planning, and establish broader relationships between transportation planning and other planning activities, such as land use and air-quality compliance. They are also intended to expand the role of planning in determining the most cost-effective strategies for getting more out of the existing system, facilitate the development of a balanced transportation system, and increase the efficiency of the system.

Most importantly, plans for the future are to recognize funding constraints. TranPlan 21 must be financially viable, Montana can not plan for a transportation system that cannot be funded.

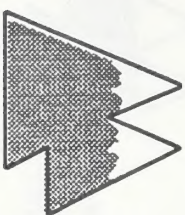
Exhibit 1 lists the factors that are considered in the TranPlan 21 process. TranPlan 21's emphasis is on addressing these factors in a way that is meaningful to Montana. This involves recognizing that Montana is one of the least populated, largest, and most rural states in the nation. These characteristics help define Montana's transportation needs and limit the potential solutions to meeting them.





# Exhibit 1: ISTEA Statewide Planning Factors

A Broader Role for Transportation Planning	Developing a Balanced Transportation System	Increasing Transportation System Efficiency
<ul style="list-style-type: none"> <li><input type="checkbox"/> Consider the overall social, economic, energy, and environmental effects of transportation decisions.</li> <li><input type="checkbox"/> Consider the effect of transportation policy decisions on land use and development.</li> <li><input type="checkbox"/> Consider access to specific types of locations, including ports, intermodal facilities, recreation areas, and military installations.</li> <li><input type="checkbox"/> Consider the consistency of transportation planning with federal, state, and local energy goals.</li> <li><input type="checkbox"/> Consider the transportation needs of areas outside metropolitan areas through consultation with local elected officials.</li> <li><input type="checkbox"/> Consider state plans developed under the Federal Water Pollution Control Act.</li> <li><input type="checkbox"/> Consider recreational travel and tourism.</li> <li><input type="checkbox"/> Consider investment strategies to improve roads that support rural economic growth and tourism development and other economic activities.</li> <li><input type="checkbox"/> Consider the concerns of Indian tribal governments.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Include methods to expand and enhance transit services to increase their use.</li> <li><input type="checkbox"/> Consider the transportation needs identified through the use of the management systems.</li> <li><input type="checkbox"/> Preserve rights-of-way for construction of future transportation projects.</li> <li><input type="checkbox"/> Consider the connectivity between MPOs within and outside Montana.</li> <li><input type="checkbox"/> Incorporate bikeways and pedestrian facilities in projects.</li> <li><input type="checkbox"/> Address long-range needs of the state transportation system.</li> <li><input type="checkbox"/> Coordinate and reconcile metropolitan and statewide plans to ensure connectivity.</li> <li><input type="checkbox"/> Consider strategies for identifying and implementing transportation enhancements.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Preserve existing facilities and meet transportation needs by using those facilities more efficiently.</li> <li><input type="checkbox"/> Consider the life-cycle costs of transportation systems.</li> <li><input type="checkbox"/> Consider methods to enhance the efficient movement of commercial motor vehicles.</li> <li><input type="checkbox"/> Consider any metropolitan area plan.</li> <li><input type="checkbox"/> Relieve congestion and prevent congestion from occurring where it does not now occur.</li> <li><input type="checkbox"/> Consider innovative financing of projects.</li> </ul>





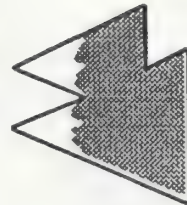
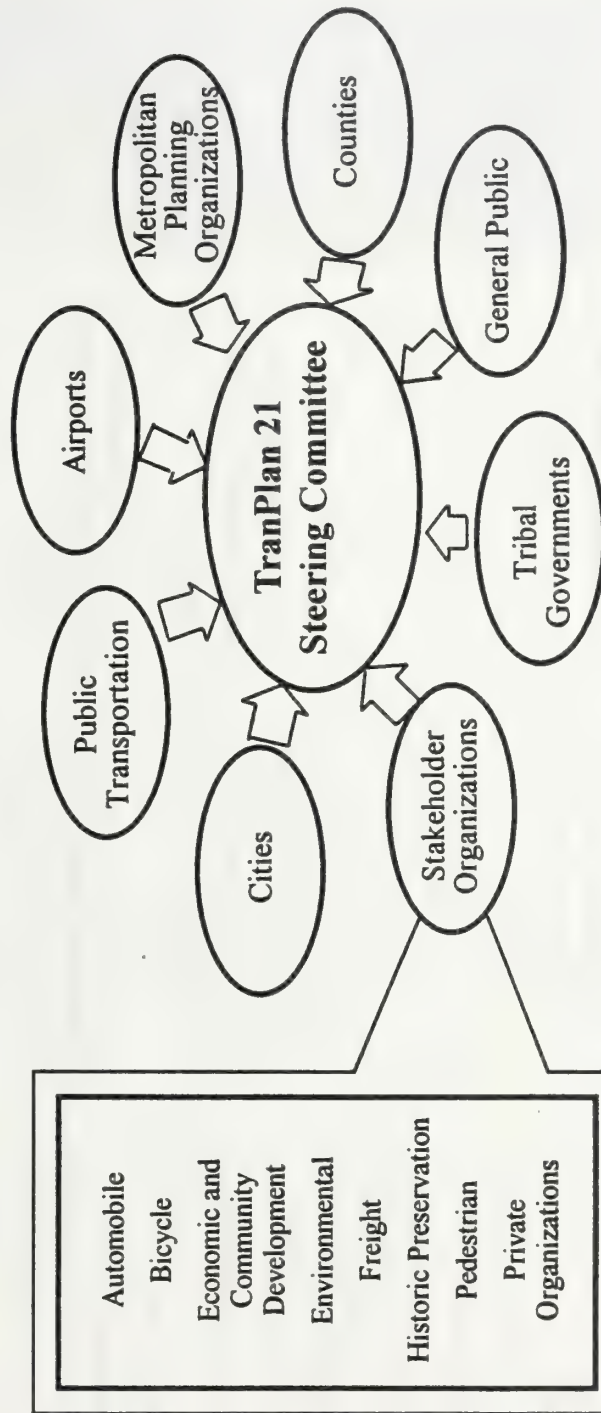
line issues identified by these participants have been addressed in the policy and technical analysis.

For the first time, Montana users and providers of transportation are involved in setting priorities and deciding on the transportation system for the future.

Exhibit 2 illustrates the broad range of transportation providers and users that are involved in TranPlan 21.

This process ensures that the plan reflects the priorities of transportation system users, citizens, public interest groups, public and private transportation providers, Tribal Governments, and other interested parties.

## Exhibit 2: Participants in the Planning Process

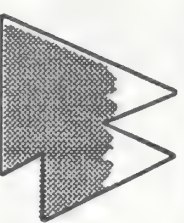


TRANSPORATION PUBLIC INVOLVEMENT  
 TranPlan 21 has been shaped by extensive early and ongoing opportunities for public involvement from trans-

portation users and providers across Montana. The extent and purpose of this involvement is illustrated by Exhibit 3.

## Exhibit 3: Extent of Public Involvement

Involvement Steps	Purpose	Role	Involvement Mechanism
Early involvement	<input type="checkbox"/> Identify issues and concerns	<input type="checkbox"/> Set agenda for policy development and technical analysis	<input type="checkbox"/> Six open houses across the state <input type="checkbox"/> Five stakeholder focus groups <input type="checkbox"/> Meetings with each tribal government (seven)
Ongoing involvement	<input type="checkbox"/> Communications and feedback on work-in-progress	<input type="checkbox"/> Data collection, participation in formulating options	<input type="checkbox"/> Written and oral comment on work-in-progress presentations <input type="checkbox"/> Telephone hotline, newsletters
Review and comment on Plan Alternatives and Policy Choices	<input type="checkbox"/> Provide input on policy options before the decisions are made	<input type="checkbox"/> Express policy priorities <input type="checkbox"/> Review and comment on draft policy papers	<input type="checkbox"/> Nine open houses across the state <input type="checkbox"/> Five stakeholder focus groups <input type="checkbox"/> Meetings with each tribal government (seven) <input type="checkbox"/> Telephone survey of 710 Montanans <input type="checkbox"/> Mail distribution of drafts <input type="checkbox"/> Written comment
Public comment on Draft Plan	<input type="checkbox"/> Public review of adopted policy goals and actions, comment on plan	<input type="checkbox"/> Additional opportunity to comment on policy decisions and plan analysis	<input type="checkbox"/> Written comment on plan documents



Montana Department of Transportation

TranPlan 21



## Exhibit 4: TranPlan 21 Development

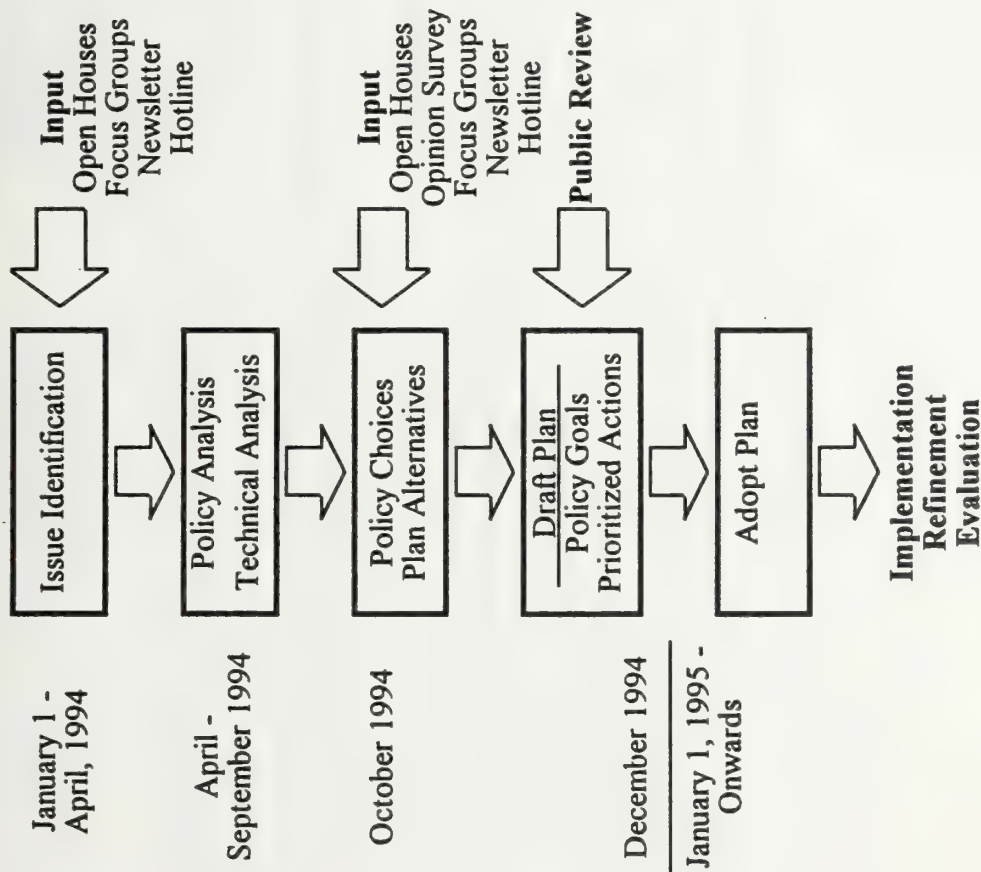
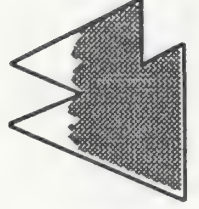


Exhibit 4 provides an overview of the different work steps involved in the development of TranPlan 21. These steps provide a solid foundation but the plan will be a continuous process. In coming years, MDT will address new issues, monitor and evaluate progress, and refine the plan as necessary.



# Technical Approach

TranPlan 21's technical work provides a comprehensive transportation perspective that includes all modes. A key goal in the technical approach has been to consider all modes of transportation including automobiles, passenger and freight trains, trucks, air, transit, bicycles, and walking in order to manage and develop the transportation system that best meets local and statewide transportation needs and goals.

To do this, the technical work has involved the following key steps:

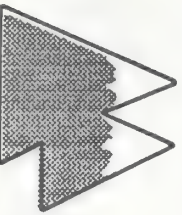
- Designating the transportation system that performs a statewide function.
- Evaluating the current use, condition, and performance of the different elements of the statewide system.
- Determining how current population, employment, and land use trends will affect future travel demand and assessing how trends in the transportation industry will affect the supply of transportation services in the future.

- Assessing the environmental conditions which need to be protected through the transportation planning process.

- Evaluating the different alternatives available for meeting future travel demands and shaping the transportation services available in Montana.

The technical analysis has helped to ensure that the policy choices developed by the plan are realistic, address Montana's most pressing needs, and can be implemented.

While for the foreseeable future, the development of non-automobile transportation options in Montana will be limited by the state's geography, climate, and low population, we recognize that we live in a time of rapid change. In the coming years MDT will build on this technical work to ensure that we continue to identify transportation solutions that Montanans can afford and that will meet our mobility needs. To help with this, MDT is developing a series of management systems, also mandated by ISTEA. They will monitor how well our transportation system works and provide the information that will enable us to refine the plan so that our transportation dollars are used most cost effectively.





# Montana's Transportation System Today

## Overview

TranPlan 21 has initiated an approach to planning and managing Montana's transportation system that includes all modes and considers how we can use the existing transportation system more effectively. This involves placing emphasis on managing the overall system and thinking about the connections between different types or modes of transportation, called intermodalism, and the choices between different types of transportation, called multimodalism.

An important element of this approach is the designation of the statewide multimodal transportation system that will be subject to state-level planning. This includes facilities and services that are operated by many different units of government and the private sector. The success of this type of planning requires close collaboration and partnership between MDT and the other jurisdictions and entities providing transportation facilities and services in Montana.

These different transportation users and providers helped identify the issues addressed by the policy and technical analysis.

## System Designation

Montana's transportation system serves a variety of different transportation demands and trip purposes. Some elements of the transportation system allow movement on a local or regional scale, others serve longer-distance intrastate, interstate, and international traffic. Most facilities serve a combination of these different types of movement. The geographic scale of trips using different transportation facilities is used to define their functional role.

For the statewide plan, we have identified facilities and services that serve an international, national statewide and/or regional function. For included facilities, MDT will plan, manage, or operate them or, in the case of private providers, will provide assistance and guidance to maximize the performance of the overall system. In this way MDT's role will become that of the steward of Montana's multimodal system.

## Designation criteria

Criteria and threshold measures of the volume of activity provide the basis to determine the elements of the transportation system that serve a statewide function. The different elements of the system and their modal components are shown in Exhibit 5. Individual criteria provide the basis for determining which of the modal components are included.



## Extent of the System

When you consider the geographic scale and low population of our state, citizens, businesses, and visitors alike have a high level of mobility.

### Passenger mobility

Montana has an extensive passenger transportation system that serves a statewide function. There are over 28,000 center line miles of road serving a statewide function, three urban and nine rural public transportation systems, an extensive network of around 75 providers of public transportation services for the elderly, intercity bus service, 14 airports with scheduled commercial flights (and dozens more with "for hire" service), and 12 Amtrak stations across the northern portion of the state.

### Freight mobility

Montana's economy benefits from an extensive multimodal freight transportation system that includes our highway and rail systems. The highways provide good access for farmers and ranchers to rail terminals, urban areas and beyond. Highways, interstates, and transfer facilities allow truckers to move goods in, through, and out of the state without significant delays. The rail system provides access to the national and global markets. Railroad companies export large volumes of income earning commodities, such as coal from the Powder River Basin,

Component	Modal Elements
Corridors	Highways, highway freight, passenger rail, freight rail, pipeline, and bicycle.
Passenger Transportation Services	Intercity bus, urban and rural fixed route transit, demand responsive transit, services for the elderly, commercial scheduled air service, and carpool and van pool programs.
Transfer Facilities	Ports of entry, freight rail stations, passenger rail stations, airports, intercity bus depots, transit centers, and intermodal freight terminals.
Connectors	Highways and rail branch lines ( <i>between transfer facilities and corridors</i> ).





gran from central and northeastern Montana, and timber from western counties, Powder River and Rosebud counties.

The state is well served by intermodal freight facilities. The growing importance of air freight to "just in time" manufacturing is satisfied by access to a well distributed network of commercial and general aviation airports.

## Multimodalism in Montana

There are two dimensions to multimodalism in Montana. First, the availability of more than one mode for making a particular trip and, second, the extent to which there are competitive choices among the different modes serving particular corridors or routes.

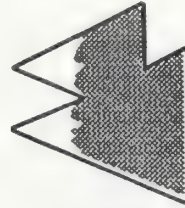
The availability of more than one mode ensures a modal balance. For passenger travel, this ensures basic mobility for passengers without access to an automobile and for travelers in need of air service. In the case of freight mobility, this ensures that rail service is available for the long distance shipment of bulk commodities.

Competition between modes is a distinguishing characteristic of multimodalism. This occurs where the markets, or demand, for modes overlap and it is possible to make choices or trade-offs between modes. For example, transit services in very large urban areas that meet journey-to-work travel demands are competing with the automobile for passengers and not just meeting the needs of those without cars.

Today, while there is some level of public transportation available to most Montanans, there is little competition between modes. Although many corridors are served to some degree by more than one mode, the modes often serve entirely different travel markets. This is illustrated by Exhibit 6 which compares the use of different modes in Montana in 1993. All the urban transit takes place in

## Exhibit 6: Use of Different Passenger Modes in 1993

Modal Element	Use in 1993
Motor Vehicles (Total daily VMT on all roads)	23,900,000
Air Travel (Enplanements)	968,000
Passenger Rail (Amtrak ridership)	139,000
Urban Transit (Annual ridership, all systems)	1,511,000
Rural Transit (Annual ridership, all systems)	326,000
Intercity Bus (Approximate ridership)	139,000
Bicycle (Trips)	Not Available
Pedestrian Facilities	Almost Everyone



Billings, Missoula, and Great Falls. The majority of air travel is to and from out of state destinations.

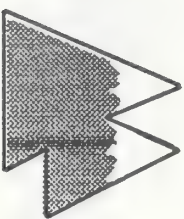
Comparing trips by mode provides a better comparison. Exhibit 7 provides journey to work information by mode. In 1990, 72 percent of our trips to work were made driving alone, statewide, another 12 percent of work trips were made in car pools of at least two, while barely one half of one percent occurred on public transportation. In the state's larger urban areas, where alternative modes of travel are generally most accessible, there was an even greater tendency to drive alone. Walking accounted for a significant portion of journey to work travel at just under eight percent. This is twice the national average and accounted for by the compact older character of Montana's urban areas.

The state's rail and highway systems serve different freight markets. The vast majority of grain, timber products, and coal leaves the state by rail, whereas 84 percent of manufactured goods enter or leave the state by truck. Where there is the potential for modal trade-offs is in getting bulk commodities off trucks and onto rail sooner.

Exhibit 7: Journey to Work by Mode in 1990

Transportation Mode	Total	Percent
Drove Alone	249,820	71.8
Car Pool	41,171	11.8
Walked	26,780	7.7
Worked at Home	21,876	6.3
Other Means	3,320	1.0
Bicycle	3,203	0.9
Bus	1,762	0.5
Total	347,932	100.0

Source: U.S. Department of Commerce Bureau of the Census, Census Transportation Planning Package



Intermodalism involves the connection of different modes of transportation and/or the transferring of freight or people from one mode to another at transfer facilities such as airports, rail stations, and intermodal terminals. The efficiency of these connections plays an important role in Montana's transportation system.

All the air transportation and passenger rail use involves connecting with other modes, usually the automobile.

In terms of freight, intermodal connectivity is extremely important for the efficiency of the system. It involves the transfer of trailers onto flat cars, containers onto flat cars, the reload of lumber from trucks onto rail cars, and the transfer of grain from trucks to hopper cars.

Montana is well served by intermodal freight facilities with key transfer points in Shelby, Butte, Billings, and Missoula. In recent years there has been a large increase in intermodal traffic in the state.

In many respects the greatest benefits from including all modes in planning in Montana is through improving the connections between modes. Examples include: coordinating intercity bus schedules with rail, urban transit schedules with intercity schedules or ensuring that there is good highway access to intermodal freight terminals.

Montana is one of the most rural states in the nation, covering a large sparsely populated land area. The highway system fulfills a central role in allowing the state to function politically, economically, and socially. Three-quarters of all miles travelled in Montana are driven outside the state's 14 urban areas.

Montana's highway system connects small communities to regional service centers and the major cities to one another and the rest of the nation. As Governor Racicot stated, "highways are the life-line and life-blood of [Montana's] economy". In addition, Montana's highway system plays a key role in the National Highway System providing important interstate and international transportation corridors.

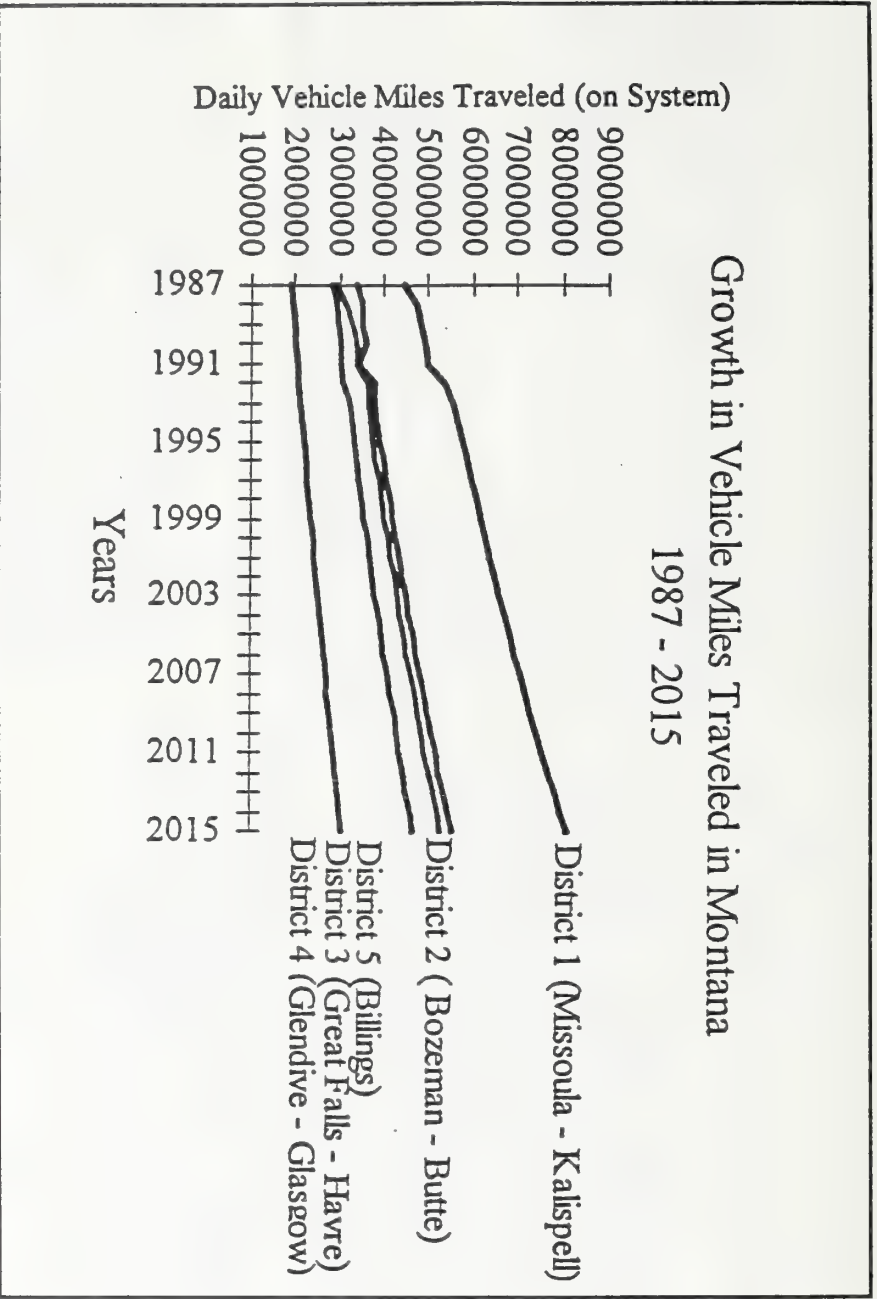
The highway system is the largest single capital investment in the state. In the same way that we must periodically paint our house or replace the roof to ensure it lasts, so, too, as a state must we preserve our highway system. In many respects it is pay now for maintaining the system or pay a lot more later.

The cost of maintaining the system is borne by the users of the system mainly through motor vehicle fuel taxes. Because we have so many miles of highway compared to population, funding for maintaining our highways will always be limited. Therefore, using existing resources most cost effectively is a key goal for the MDT.

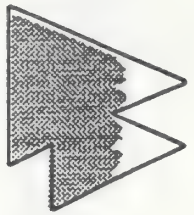




Exhibit 8: Forecast Traffic Growth Through 2015, by MDT District



Source: TranPlan 21 Travel Model



Montana Department of Transportation

TranPlan 21

The highway system is extensive, there are over 12,800 center-line miles and 2,353 bridges on the system that receive funding from the state.

Over the past ten years, the MDT has been successful in improving the condition of highway pavement throughout the state. This has been due to investing resources in preservation. Today, our pavement conditions are above the national average. Through the Save Our Secondaries program, the MDT has been improving conditions on the secondary system, but more work is needed.

Although pavement conditions are generally good, many of Montana's major highways have structural needs related to their age. Approximately 25 percent of our primary routes were constructed before 1950.

Of the 2,353 bridges on the system, just over four percent are structurally deficient and 15 percent are functionally obsolete. Most bridges in the western part of the state are in need of retrofitting for seismic safety.

## Highway use

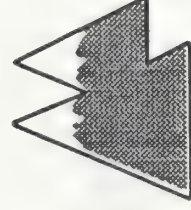
The use of highways is measured in terms of vehicle miles travelled (VMT). For the past twenty years, Montanans have been driving more each year. Consequently, as our population has grown there has been a rapid increase in VMT. Exhibit 8 shows recent growth in VMT for each of

Statewide, the forecasts indicate a slowing in the rate of VMT growth over the next twenty years. However, there will continue to be considerable statewide variation. For District 1 (Missoula - Kalispell) an average annual growth rate of 3.9 percent is forecast compared to 2.9 percent in District 2 (Bozeman - Butte), 1.5 percent for District 3 (Great Falls - Havre), 1.9 percent for District 4 (Glasgow - Glendive), and 1.4 percent for District 5 (Billings).

Statewide commercial vehicle VMT is expected to grow at a slower rate than passenger vehicle VMT. It is hoped that increased use of other modes such as walking, bicycling, and public transportation will slow the rate of VMT growth. However, experience from demand management programs in large metropolitan areas suggests that successful demand management programs have at best modest impacts on the rate of VMT growth.

Employment, population growth, increased tourist visitors, and the increase in the amount Montanans drive each year are the main factors driving our forecast of VMT growth.

Car ownership in Montana is high, 64 percent of households have two or more vehicles, 30 percent have one vehicle, and only 6 percent have none. Montanans use their cars because they offer the cheapest, most convenient, quickest and reliable means of transportation for most journeys.



## **Future conditions**

The physical or structural condition of the highway system and the capacity of the system compared to the forecast traffic volumes are the two key measures of future conditions. The physical condition of the highway and bridge system will be affected by the use of the system and the funds that are available for preservation (preventive maintenance) and major reconstruction. As noted earlier, Montana has a large system which requires an extensive program of maintenance and preservation. MDT is developing the ability to determine the remaining life of existing pavements and identify the most effective pavement preservation strategies. A major challenge will be to balance the need for pavement preservation with demands arising from growth.

Demands arise from growth because additional capacity is needed when traffic volumes grow and approach the design capacities of the roadway. As this happens, the level of service is degraded. This creates the need for modernization improvements, safety improvements, and pure capacity improvements. Safety is an important consideration. In 1991 there were 200 motor vehicle deaths in Montana.

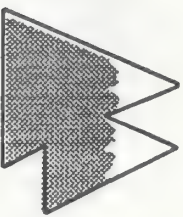
Our forecasts indicate a continued increase in the use of the highway system in Montana. This growth will be greatest in western Montana. Without significant improvements or a change in travel behavior, the forecast levels of traffic will result, over the next 20 years, in significantly lower levels of service on major corridors in Lake, Flathead,

Missoula, and Kavalli counties, and we will have congested segments and interchanges in our urban areas.

TranPlan 21 uses level of service as a measure of congestion at the corridor level. Level of service is a highway performance measure that includes factors such as speed and travel time, safety, convenience, freedom to maneuver, and traffic interruptions. Those corridors which are currently at a level of service D or worse and those which are forecast to be at a level of service D or worse by 2015 are shown on Maps 1 and 2 on the following page, they are considered congested.

Level of service D is characterized by high density, stable traffic flow with speed and freedom to maneuver severely restricted. The driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level. The motorist experiences this as congestion.

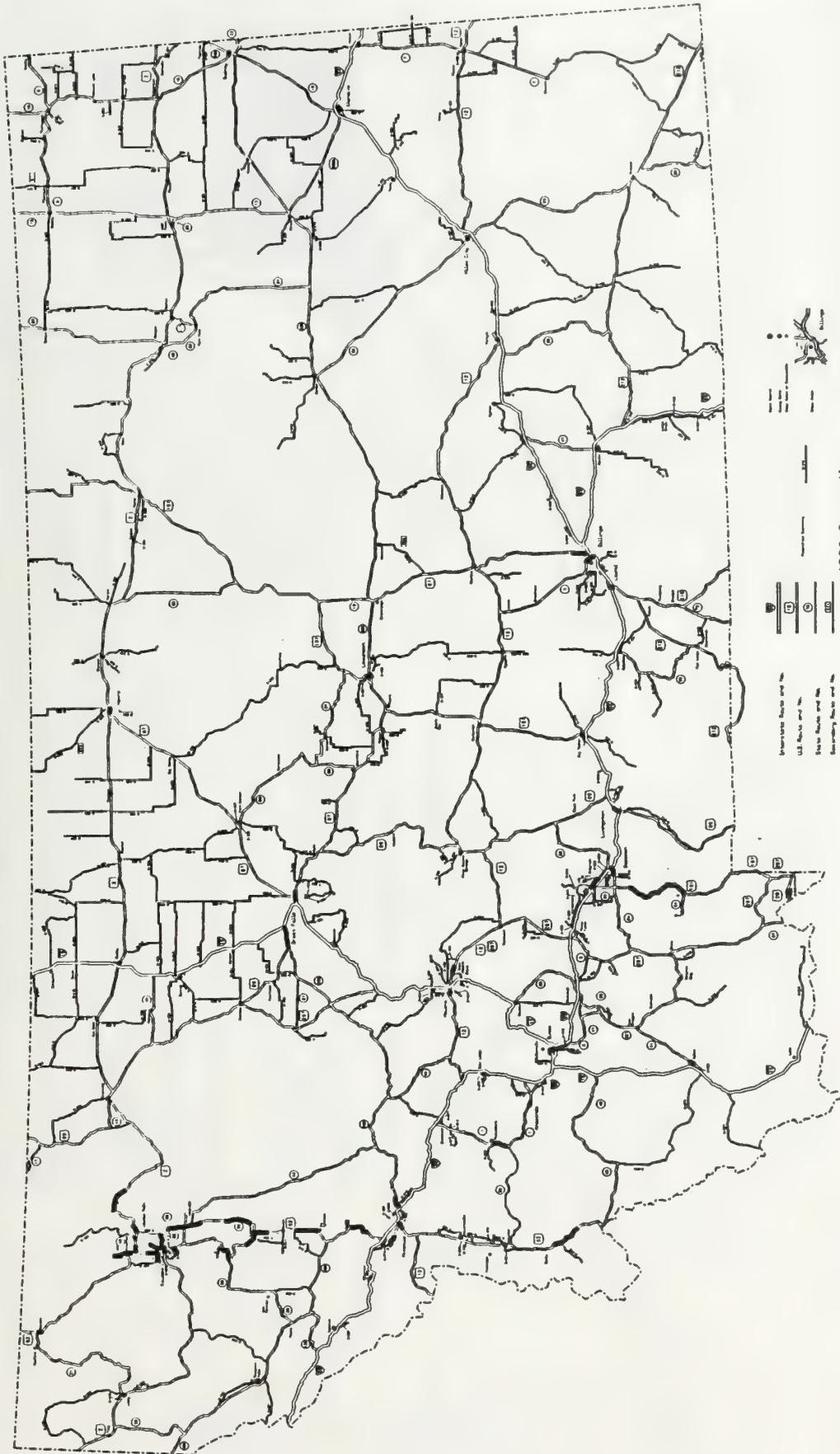
A key planning question is determining how to meet these forecast demands of corridor level congestion. There are limited choices. Even with the most optimistic of assumptions, given our rural characteristics, only a small amount of our traffic growth could be reduced by carpooling or transit. The choice will be between having a lower level of service or undertaking system management steps, such as access control, and making the modernization and capacity improvements necessary to maintain the level of service.



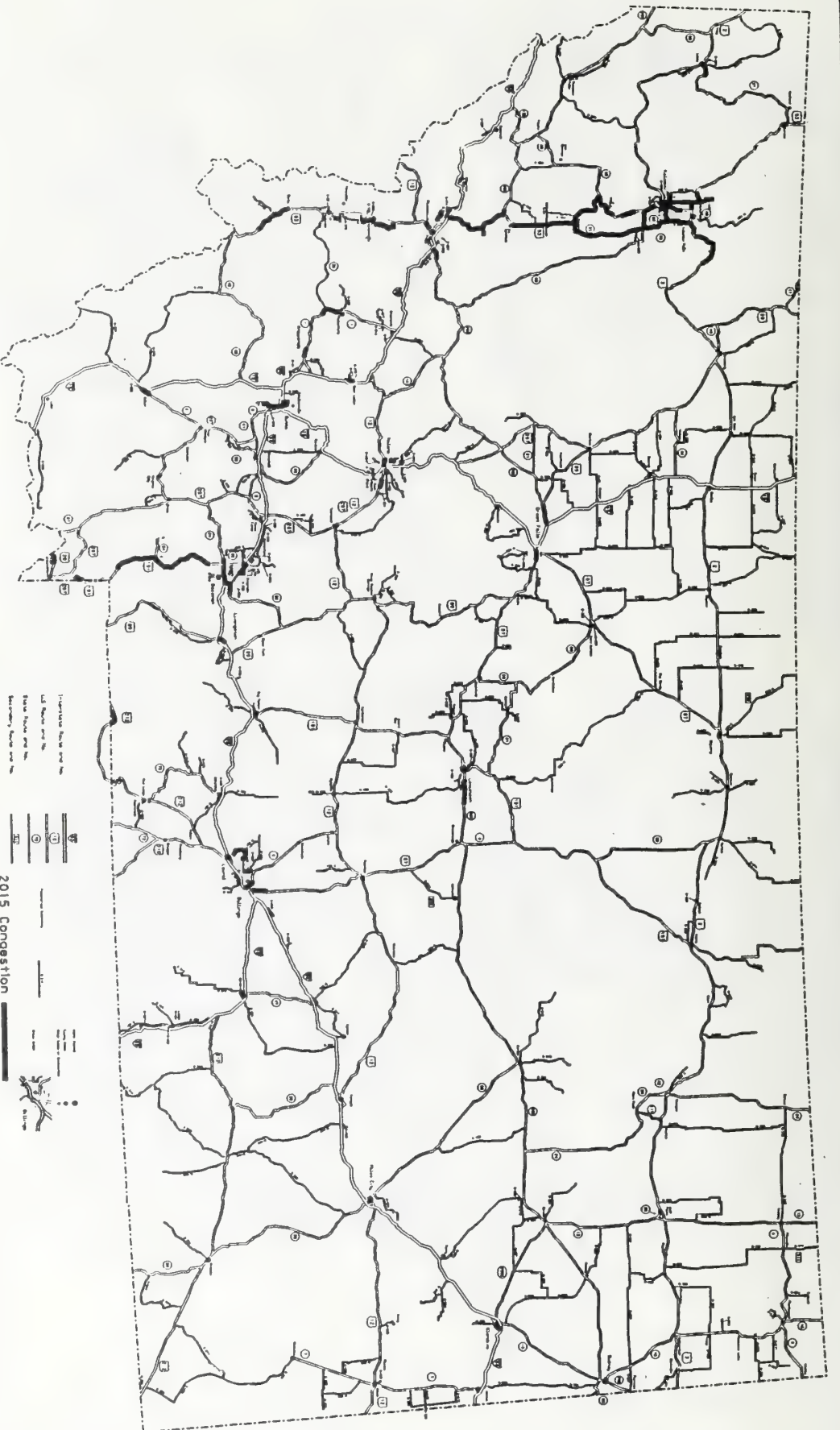


# CURRENT CONGESTED CORRIDORS

Map 1



Source: TranPlan 21/Congestion Management System



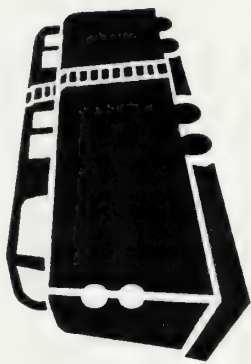
DEPENDS FOR TRAIL HOODS IN MONTANA ARE MET BY highway, rail, and air transportation modes or a combination of these modes. The state's intermodal freight system is mapped at the end of this section.

### Key Highway Planning Issues

- Improvements needed in response to growth
- Need for access management and coordination with land use
- Concern about low volume roads
- Need to support tourism and growth industries
- Pavement impacts from trucks
- Importance of balancing capacity and preservation needs
- Desire for more explicit project selection criteria
- Concern about billboard proliferation
- Importance of accommodating other modes on roadways

### Freight rail

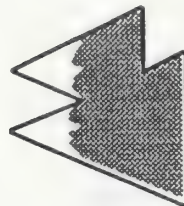
Montana has an extensive freight rail system comprised of just under 3,500 miles of track. Although the track mileage has declined over the past decade, the volume of freight shipped by rail has remained steady. Freight rail annually moves approximately 166,000 carloads, 78 percent of which are used to export Montana products. Grain, lumber, and coal are the primary goods shipped by rail. This does not include "bridge" traffic passing through the state.



There is an extensive network of freight rail stations in Montana. For example, in 1991 there were 40 stations with 1,000 or more originating and terminating non-coal rail carloads and a further 29 with between 500 and 999 originating and terminating carloads. Intermodal freight rail in Montana involves the transfer of trailers on to flat cars, containers onto flat cars, the reload of lumber, and the transfer of grain from trucks to hopper cars. There has been a steady increase in the use of intermodal facilities in Butte, Shelby and Billings.

### Intermodal Freight System

Montana's economy was built on a foundation provided by agriculture, mining and wood products. Today, service related businesses and tourism are becoming increasingly important. Montana's freight transportation system provides the infrastructure that these industries need and hence is critical to the state's economic well being.





Recent years. In 1993, 10,275 tons of cargo were shipped by air, an increase of 18.6 percent over 1990. About 80 percent of air freight was imported to Montana.

Montana's highway system plays an important role in the shipment of freight. The heaviest concentration of interstate or intrastate truck movements is along the interstate highway corridors. The busiest truck route is Interstate 90 west of Billings. This is the only route in the state that carries on average more than 1,000 commercial vehicles a day.



The vast majority of manufactured goods are shipped into and out of Montana by truck. Within Montana, due to its flexibility and the door-to-door service it provides the trucking industry is almost exclusively responsible for shipping freight. Much of Montana's agricultural commodities are hauled at some point by truck to grain terminals and railroad stations.

Although there is no origin and destination information available, truck count data suggest that a large portion of interstate truck traffic involves trucks crossing the state. Within Montana, the commercial traffic is most heavily concentrated between the major population centers.

## Air freight

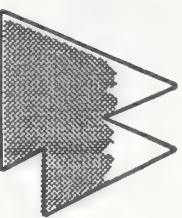
Air freight plays a significant economic role. Although low volume, it is high value and has grown considerably in

## Future conditions

Over the past decade there has been a decrease of about 1,400 miles of freight rail track, mainly due to the abandonment of branch lines. While this has not decreased the overall use of rail it does adversely impact local communities formerly served by the branch lines. The abandonment of branch lines peaked in the 1980s, however, the railroad industry continues to restructure, and it is difficult to predict the impacts for Montana. It is reasonable to assume that the potential for the loss of further branch lines remains.

Historically, there has been a steady increase in the volume of truck traffic. Although this traffic has grown at a slower rate than passenger traffic, future growth will impact pavement conditions. Montana's most recent Cost Allocation Study concluded that trucks pay their "fair share" relative to other vehicles towards maintenance and construction of the highway system.

There is a widespread expectation that there will be significant increases in the volume of freight traffic traveling to and from Canada. There has been an increase in grain being hauled to rail stations in Montana and livestock hauled by truck across the state. However, the nature and extent of the size of this is not clear. Both the United States'



west as are the institutional and trading relationships of the shippers. Changes in the volumes and directions of trade flows will be slow but do need to be monitored.

One indicator of increased traffic between Montana and Canada is the change in the number of commercial (trucks) vehicles at the border crossings. Recent experience is shown in Exhibit 9, below. This exhibit shows that with the exception of Sweetgrass, daily cross border commercial traffic volumes remain low, although they have grown significantly in a number of locations.

**Exhibit 9: Commercial Traffic at Montana-Canada Ports of Entry, 1983-1993**

Port of Entry Location	Average Daily 1983	Commercial Traffic 1993
Morgan	14	19
Opheim	7	16
Piegan	15	63
Raymond	27	70
Rooseville	102	120
Scobey	23	10
Sweetgrass	167	400

Source: Montana Department of Transportation

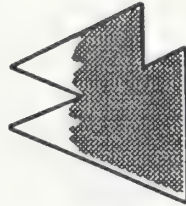
### Key Freight Planning Issues

- Loss of rail branch lines
- Citizen concern over impacts on pavements from truck volumes
- Citizen desire to shift freight from road to rail
- Uncertainty over new demands from international trade
- Recognizing the economic importance of the entire highway system
- Increasing importance of air freight

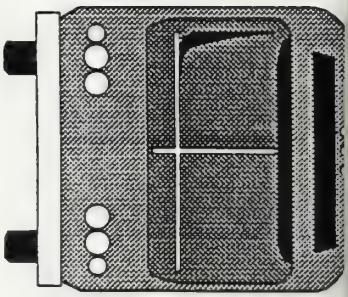
Air freight is increasingly important to the economy. Its importance to Montana will likely increase.

## Passenger Transportation

Public transportation includes all the passenger transportation options available other than driving alone. This includes urban and rural transit, demand responsive transit for the elderly and disabled, passenger rail, intercity bus, commercial scheduled air service, car and van pooling. These are provided by the private sector, not-for-profit organizations, and different public agencies.







experienced changes in the organization and provision of public transportation. There has been a continued reduction in the public transportation services available and in the use of these services. The decrease in service has been most pronounced for intercity travel.

In 1979, Amtrak ended service across the southern part of the state and over the past ten years intercity bus services have steadily declined. This trend has continued in the short time period during which the plan has been prepared.

## Intercity bus

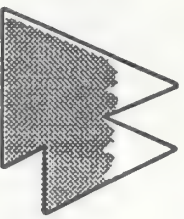
Intercity bus companies now provide service to and between Montana's major urban areas. In recent months Intermountain Bus Lines has ceased business and there is a very strong possibility that Greyhound Lines, Inc. will not operate in Montana as of January 1, 1995. It is important to note that the majority of Intermountain's routes are now operated by Rimrock Trailways with some increased services. Rimrock Trailways is now the largest operator in the state in terms of schedule miles operated.

## Key Passenger Transportation Planning Issues

- Need to identify options that will work in Montana
- Desire for a multimodal system
- Social role of public transportation
- Need to promote public transportation
- Desire for transit-friendly infrastructure
- Funding for transit
- Concern about condition of terminals
- Need for improved system coordination
- Preserving essential air service
- Determining whether demand management can work in Montana

## Urban transit systems

There are urban transit systems in Missoula, Great Falls, and Billings. These systems are used mainly by the transit dependent. Ridership is low, and journey-to-work trips account for between a quarter and a third of all passengers.



trips were by bus, in Missoula 1.5 percent, and in Great Falls 1.0 percent in 1990. Overall ridership has been falling. Between 1990 and 1993 ridership in Billings fell by 21 percent and in Great Falls by 13 percent, although ridership increased in Billings in 1994.

### **Rural transit systems**

There are nine rural public transportation systems in Montana serving rural areas and cities under 50,000 population. Two of these, Butte and Kalispell, are fixed route. In 1993 the rural transit systems statewide carried 326,441 passengers; an increase of some 13,657 since 1990.

### **Transportation for the elderly and the disabled**

Montana has many local programs supported through federal assistance to providers of transportation services for the elderly and disabled. There are now more than 75 recipients of funding across the state. In 1993 they provided over 127,000 rides to elderly and disabled passengers, a figure that has been increasing. These transportation services provide an important role in ensuring mobility for the disabled and the state's growing elderly population.

### **Passenger rail**

Passenger rail service in Montana is provided by Amtrak across the northern portion of the state. In the ten

by 14 percent in Montana.

Ridership has risen markedly at Whitefish, East Glacier Park, Essex, and Belton-West Glacier stations. This is due to increased use of rail to access summer and winter tourist destinations and the growth in population in these areas. Stations further east at Havre, Malta, Glasgow, and Wolf Point have experienced an overall traffic decrease.

### **Commercial scheduled air service**

Despite its low population and recent schedule changes, Montana remains well served by air transportation. Despite being a large sparsely populated state with only a small market, almost all Montanans are within a one county distance of an airport with scheduled commercial service.

Passenger air transportation traffic in Montana has grown in recent years, increasing by 12.5 percent between 1986 and 1993 at Montana's major commercial service airports (Billings, Butte, Bozeman, Great Falls, Helena, Kalispell, and Missoula). However, future trends are uncertain because the air carriers may reduce further services into Billings and other cities. During this period enplanements fell at both Billings and Great Falls. The 1980s saw a decrease in enplanements.

Air transportation services to eight Montana airports: Glasgow, Glendive, Havre, Lewistown, Miles City, Sidney, and Wolf Point are subsidized through the federal government's Essential Air Service program. Although the





numbers using the service are low, it integrates central and northeastern Montana into the state and national economy. In recent years there has been a steady increase in the use of essential air services. Between 1986 and 1993 enplanements at Wolf Point doubled, at Glasgow they increased by almost two-thirds, and at Lewistown they increased four-fold. There is some uncertainty over the future of federal funding for the Essential Air Service program.

## **Future conditions**

Population growth will create some new demands for public transportation. However, those moving to Montana will tend to be more affluent and less likely to use public transportation. Recent trends indicate that we should expect to see a stable demand for transit.

Forecasts for future passenger rail use indicate that there will continue to be increases in the demand for Amtrak services. This demand will be most heavily concentrated at the stations serving Glacier National Park and Whitefish/Kalispell. Over the past decade, the use of the Whitefish station almost doubled and a fast pace of growth is forecast for the next twenty years. However, a continuation of past trends may bring into question the future viability of stations in eastern Montana. Also of concern is Amtrak's December, 1994 announcement of reductions in Empire Builder service.

Federal Aviation Administration forecasts show a steady continued growth in passenger enplanements at all Montana's airports. The forecasts only show small increases for the airports in northeastern Montana that are served through the federally funded Essential Air Service program.

## **Role of demand management**

The existing public transportation system represents a considerable public investment which if utilized, instead of the car, can play a role in congestion management and air quality improvement in Montana's urban areas. As such it represents one element of a portfolio of strategies for ensuring continued mobility in Montana.

## **Pedestrian Transportation**

Walking is an element of almost every trip. Just under eight percent of Montanans walk to work every day. This is almost twice the national average. One reason is that Montana's urban areas are relatively old, many dating back to the turn of the century, and tend to have dense central business districts and neighborhoods built on a scale that is conducive to walking. Montana's urban areas are placing increased attention on ensuring that the transportation infrastructure is pedestrian friendly.

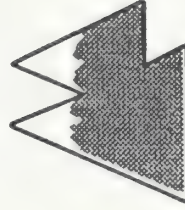


Bicycles are used as both a mode of transportation and for recreational purposes. Bicycle use for journey to work is greatest in Missoula and Bozeman, there are no data available about use for other trips or by school children. Nationally, and in Montana, in recent years there has been an increase in ownership of bicycles.

## Key Bicycle and Pedestrian Planning Issues

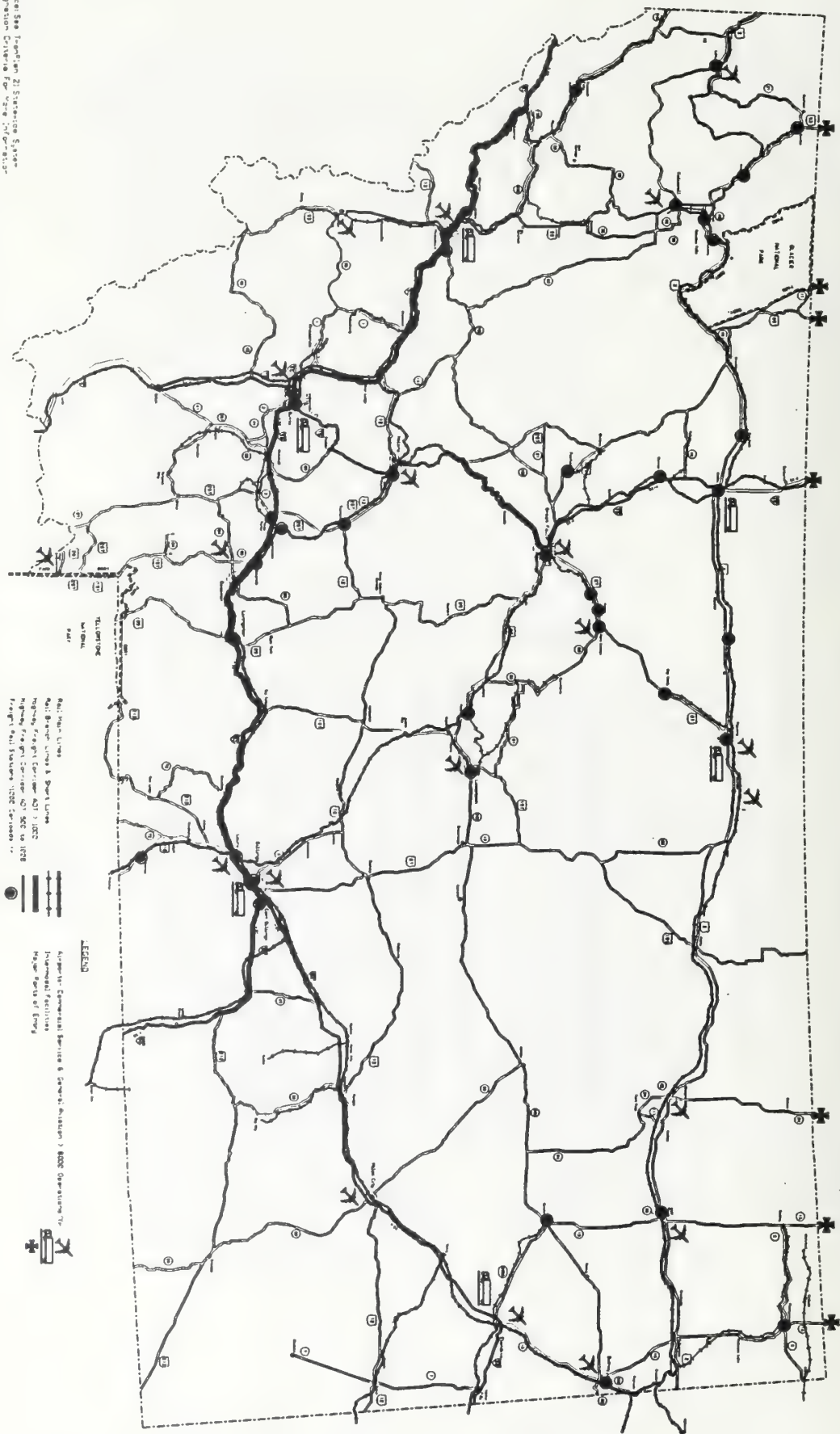
- Considerable public interest in bicycle and pedestrian facilities
- Safe accommodation of bicycles on the highway
- Pedestrian and bicycle friendly highway design
- Avoidance of system discontinuity
- Promotion of bicycle and pedestrian use
- Institutionalize as an element of the multimodal transportation system

Recreational cycling is popular in Montana and is used as a mode of transportation by bicycle tourists visiting the state. There are a number of active cycling clubs in the state. Adventure cycling organizations have developed their own touring routes through Montana which are nationally noted.





# STATEWIDE INTERMODAL FREIGHT SYSTEM



Rail: Major Lines  
 Rail: Branch Lines & Short Lines  
 Highway: Freight Corridor ADJ 1002  
 Highway: Freight Corridor ADJ 502 to 1078  
 Airport: All Stations 1002 Corridor



Airport: Commercial Service & General Aviation 1002 Operating  
 Intermodal Facilities  
 Major Ports of Entry



Source: See Map of Georgia 2000  
 Copyright: Georgia Department of Transportation

The map illustrates the dense railway network of the Tokyo region. It shows a complex web of lines connecting various stations, with a high concentration of lines in the central and eastern parts of the map. The legend on the right provides the following information:

- General Public Rail Service:** Represented by a solid line.
- Express and Limited Rail Service:** Represented by a line with cross-ticks.
- Private Rail Service:** Represented by a line with a dashed center.
- General Airports (Excluding Air Services):** Represented by an airplane icon.
- Service - General Station:** Represented by a circle with a cross.
- Service - Limited Station:** Represented by a circle with a dot.
- General Station:** Represented by a circle.
- General Airports (Excluding Air Services):** Represented by an airplane icon.

Additional labels on the map include "TELLINGTON" and "MILWAUKEE" in the upper right, and "MILWAUKEE" in the lower right. The map is oriented with North at the top.

Service	Vehicle	Rate
General Public Bus Service		\$1.50
Senior and Disabled Bus Service		\$1.50
Emergency Bus Service		\$1.50

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 2. **NAME**  
 3. **AGE**  
 4. **ADDRESS**  
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 6. **STATE**  
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 9. **TELETYPE**  
 10. **FAX**  
 11. **E-MAIL**  
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As a basis for our planning, we have identified the key factors affecting the future demand for and supply of transportation in Montana. The future level of transportation demand will be determined by population and economic changes affecting the state. Factors affecting the supply of transportation include the difficulty of keeping transportation revenues in pace with inflation, the importance of environmental protection, and the need to balance the competing values and priorities of different Montanans.

## Population Growth

Western Montana and the Bozeman and Billings areas have grown considerably in recent years and there has been little growth elsewhere. Between 1980 and 1990 population in the state grew by only 10,000. However, in the short period between 1990 and 1993 it grew by 40,000 to 839,000, an increase of five percent. Our forecasts indicate a continuation of these more recent trends for the next twenty years.

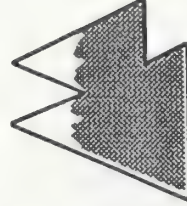
With respect to the transportation system, the most significant feature is that the growth is very uneven. It is most heavily concentrated in the west of the state and greatest in the rural counties immediately adjacent to the

urban areas. Almost half the growth forecast through 2010 will occur in Northwest Montana. The region's growth rates are illustrated in Exhibit 10, below, and forecast population growth by county is shown in Exhibit 11, on the next page.

### Exhibit 10: Forecast Population Growth by Region, 1990 to 2010

Montana Department of Transportation Financial District	Forecast Population Growth 1990 to 2010	
	Number	Percent
District 1 (Missoula-Kalispell)	61,000	28
District 2 (Bozeman-Butte)	20,000	15
District 3 (Great Falls-Havre)	12,000	7
District 4 (Eastern)	0	0
District 5 (Billings)	31,000	19
<b>All Montana</b>	<b>124,000</b>	<b>16</b>

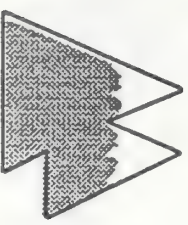
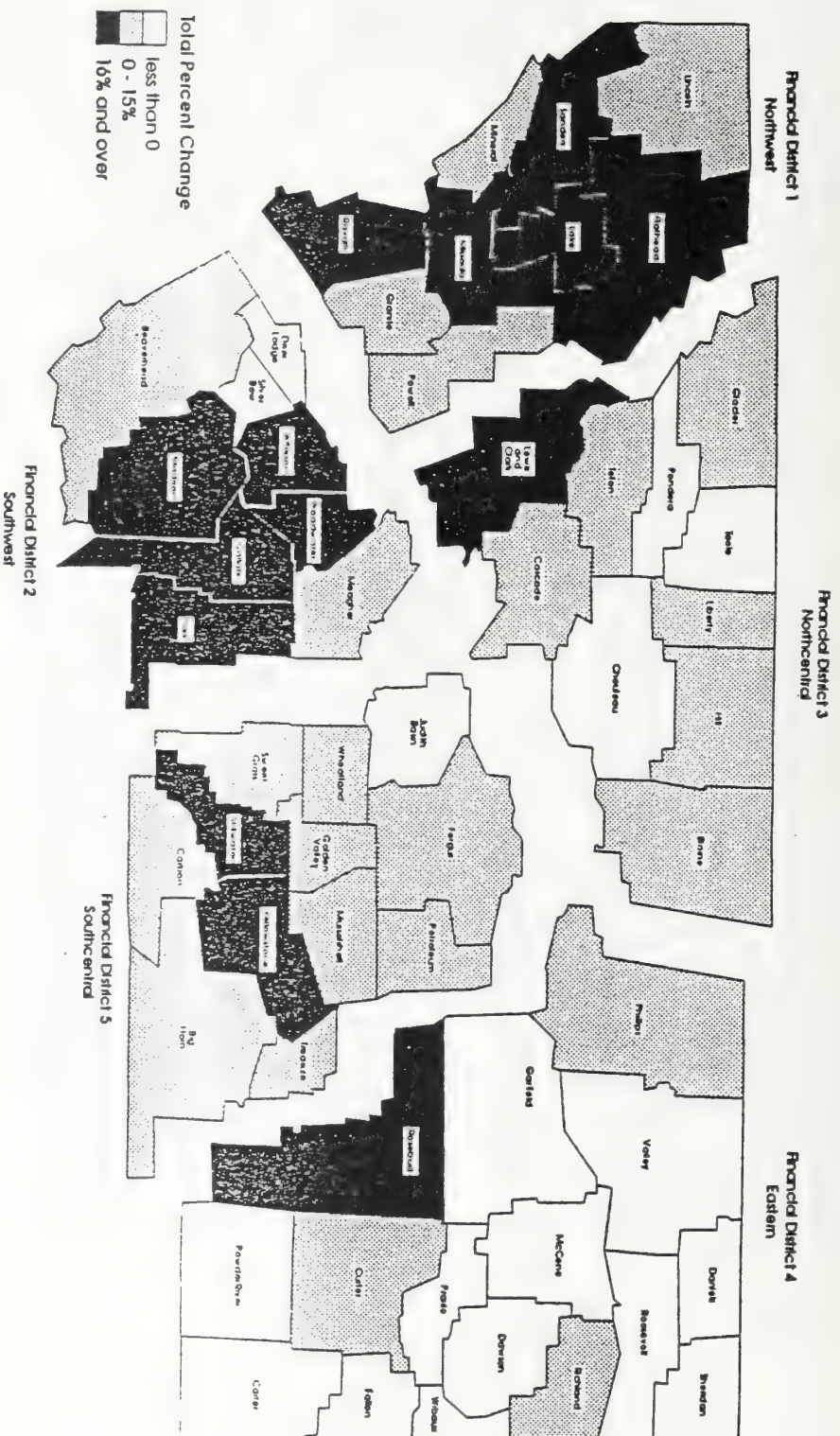
Source: NPA Data Services



Montana Department of Transportation



# Exhibit 11: Forecast Population Growth Rate by County, 1990 to 2010



Montana's economy was built on a foundation of agriculture, mining, and forest products. These "basic" industries are heavily dependent upon the statewide network of highways, railroads, and intermodal transfer facilities for exporting their products. They will continue to be major users of the existing transportation system. Preserving the existing network of highways, branch lines, and mainlines will be important for these industries. Attention to the changing transportation needs of Montana's traditional industries will be required to ensure they continue to provide a stable economic base for the future.

## Service sector growth

The major economic change creating new and different demands on the transportation system is the growth of the service sector. Private service industries such as health care, recreational activities, legal services, and management consulting are among the fastest growing in Montana. The rapid growth in Montana mirrors trends throughout the entire nation. In Montana, much of the growth is due to an aging and more affluent population, growth in health related services, a growing demand for business support services, and most importantly, growth in tourism and recreation. Earnings in these industries are projected to double over the next 20 years.

more important component of Montana's economy, transportation needs within the state will expand. For example, Montana's traditional basic industries of agriculture, mining and wood products rely heavily on quality motor freight and rail service to meet their daily transportation needs. However, emerging new service businesses are more likely to utilize package delivery services, air transportation and electronic media to support their day-to-day business activities.

Service sector growth will create significant additional transportation demands. Although the service industry is diverse, we can generalize to say that service industries generate relatively large numbers of trips. Service employment is also increasingly concentrated in the state's urban areas and will further increase traffic volumes in those areas.

Tourism and recreation are generating considerable new travel demands. It is estimated that 6 million nonresidents entered Montana by car in 1993, up from 4.5 million in the mid 1980s. Nearly one million nonresidents entered by air in 1993. Tourism-related demand for Amtrak services to Whitefish and other stations serving Glacier Park has increased rapidly. Montana's National Parks and ski resorts are the most popular destinations. Visitor counts have increased steadily during the 1990s.





Nonresident travel and tourism is expected to continue to grow over the next decade and with it will come continued increases in seasonal traffic on Highway 93 and other routes utilized by tourists. Of particular concern for regional and urban area planning, is the high concentration of the tourist economy in Flathead, Gallatin and Yellowstone counties. In these areas, special management strategies may become necessary for dealing with tourism related transportation demand.

## **Regional economic change**

The geographic location of expected economic growth is an important consideration. In general, the economies in Montana's urban centers and their surrounding rural counties are expected to grow most rapidly. The urban areas tend to have the most diversified economies with a higher concentration of rapidly growing service-related businesses.

The southwestern and northwestern regions of the state are well-positioned for future economic growth. These regions will likely benefit from both expanded tourism and established growth industries including health care, universities, business support services and other rapidly growing services. Future growth will build from established urban centers such as Bozeman (Gallatin County), Missoula (Missoula County) and Kalispell (Flathead County). It is important to note that economic growth in these established urban centers is expected to ripple out into the adjacent rural counties.

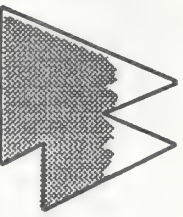
The region surrounding Montana's largest population center, Billings (Yellowstone County), also is anticipated to experience significant new economic growth over the next 20 years. Yellowstone, Big Horn, Carbon and Rosebud Counties each have projected total earnings growth rates in excess of the statewide average. To the north of Billings, significant economic growth is expected in Fergus and Judith Basin Counties. Like western regions of the state, tourism and service-related businesses will be a primary source of growth in the southcentral region. Expanded coal mining activity may also contribute to the region's future growth.

Economic forecasts indicate a considerably slower business growth rate in the northcentral and northeastern regions of Montana.

Regional economic change will increase travel demand in the larger urban areas and exacerbate the existing corridor-level congestion in parts of western Montana.

## **Financial Constraints**

Montanans are fortunate to have such an extensive transportation system. However, the state has a small population to support such a system. Uncertainty over the ability to preserve today's system and finance the improvements that will be needed to meet travel demands over the next twenty years places a constraint on the supply of transportation facilities and services.





## Highway system needs

Construction and maintenance of the highway system is paid for by users through fuel taxes, vehicle registration fees both at the state and federal level. The fuel tax is an equitable funding mechanism, because if you use the system you pay for it. However, the value of the tax does not keep pace with inflation because it is charged per gallon. Even during times of low inflation the buying power is steadily eroded. An additional problem arises because the actual cost of highway improvements continues to grow at a faster pace than inflation. This further erodes the buying power of transportation dollars.

The infrastructure needs identified for preservation, modernization, and capacity improvements were much greater than forecast revenues. Our preservation needs alone will grow considerably over the next twenty years and they will further outstrip revenue unless our fuel tax at least can keep up with inflation.

## Passenger transportation needs

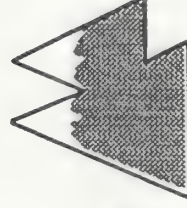
Except for operating costs, transit is largely funded by the federal government. Fare box revenues contribute a small proportion of the cost. A significant problem affecting the supply of transit services in Montana is funding operating costs. TranPlan 21 includes provisions to use surface transportation funds to fund transit projects, however, the transit provider would need to be able to fund the

state match and demonstrate the ability to cover operating costs.

Air transportation services are provided by private sector firms. The services provided in Montana are affected by the organization of the industry and the size of the "Montana market." Services to communities in northeastern Montana are available because of the federally funded Essential Air Services program. This service is vital for the economy of northeastern Montana, however, the future of federal funding over the next 20 years is uncertain.

Intercity bus service in Montana is provided by the private sector. The future supply of these services will be affected by the continuing restructuring in this industry. Early in 1995, MDT will be evaluating whether there are any actions that the public sector can take to ensure minimum levels of intercity bus service.

Passenger rail service in Montana is determined by the decisions made by Amtrak. Amtrak's recently announced service cuts will impact Montana. The state has very little influence over these decisions. Scheduling decisions concerning Montana will be affected by Amtrak's overall approach to delivering east-west rail services over the next twenty years. Reintroducing Amtrak service in southern Montana would require a large annual federal operating subsidy. In 1992 this was estimated at between \$12.6 and \$15.3 million each year. These figures do not include any capital costs for track or station improvements.



# Environmental Protection

Reducing the environmental impacts from our transportation system has become an increasingly important goal nationally and in Montana. The National Environmental Protection Act and the Clean Air Act Amendments place strict requirements that guide how we maintain and improve our transportation system. Ensuring good air quality, preserving the natural environment, and maintaining the quality of life are environmental objectives that are planned for.

The key to protecting the environment is through early coordination with other state and federal agencies to identify environmental concerns and minimize environmental impacts. This will help reduce the planning, design, and improvement costs in environmentally sensitive areas and the now considerable time it takes to agree on and undertake improvements.

## Balancing Different Values and Priorities

Montanans across the state have different values and priorities for the transportation system. In managing the transportation system, MDT has to balance these values and priorities while ensuring that our transportation system provides the mobility we need.

The need to respond to different values and changes in local priorities will continue to affect the transportation system as it is developed. Rather than plan in a vacuum, MDT has identified the transportation issues of importance to Montanans and addressed them in the plan.

Following are some of the issues and priorities expressed by transportation stakeholders.

### Bicycle and Pedestrian Issues

- Strong public interest in bicycle and pedestrian facilities
- Need to recognize geographic and climatic constraints

### Economic Development Issues

- Ensuring access from rural areas
- Preserving existing system
- Supporting local economic development
- Positioning Montana to benefit from international trade
- Supporting tourism development



**Land Use Planning/Growth Management**

**Issues**

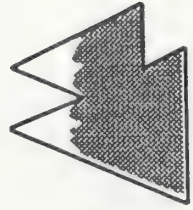
- Coordinating transportation and land use planning
- Growing local interest in land use planning
- Limited local capacity to undertake land use planning
- Directing attention to growing areas

To further identify values and priorities, a telephone survey of 710 Montanans was undertaken. As part of the survey, respondents were asked to rate their satisfaction with the transportation system, identify what they consider to be the most serious problems facing the state, and express their priorities for governmental action to improve the transportation system. Exhibit 12 lists the most important transportation problems identified through the survey and the survey respondents priorities for public action to management and develop the transportation system.

**Problem Areas and Priorities for Action**

Importance	Most Serious Problem	Priorities for Action
1	Passenger rail availability	Improving highways
2	Traffic from growth	Improving safety
3	Bus depot condition	Increasing capacity
4	Condition of highways	Pedestrian friendly improvements
5	Low transit use	Preserving rail branch lines
6	Rural air service	Promoting rail service use
7	Bicycle facilities	Ensuring economic development
8	Traffic congestion	Ensuring adequate cycling facilities
9	Transportation connections	Changing travel modes
10	Single occupant vehicles	Promoting transit

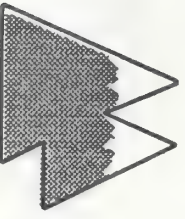
Source: *TranPlan 21, telephone survey*



Montana Department of Transportation

TranPlan 21





# Policy Objectives, Goals and Actions

TranPlan 21 has established Montana's preferred future transportation system and the policy goals and actions that define the state's role in moving Montana toward that future. The preferred future developed through TranPlan 21 provides Montana with a long-range statewide vision for the management and development of the transportation system. It is a vision that can be achieved. The policy goals and actions are MDT's plan for achieving these objectives.

## Preferred Future

Transportation planning requires long lead times, large public investments, and defining the type of transportation system that is desired. TranPlan 21 has defined the characteristics of the future transportation system that Montana will plan for and its role in supporting economic development, environmental, and social objectives. The transportation system objectives for achieving the preferred future are presented in Exhibit 13.

## Preservation of the system

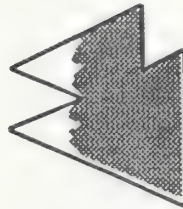
TranPlan 21 places high priority on preserving the transportation system as it exists today in Montana and

maximizing the capacity of the current system. As described in earlier sections, Montana has an extensive transportation system that serves a small population base. The planning objective is to ensure that the operational and physical condition of this entire multimodal transportation system is preserved in the most cost-effective manner available.

This involves preserving and maintaining highway pavement at today's level or better. In future years this will involve working to ensure that there is sufficient revenue available for pavement preservation. To preserve the system will also involve implementing access management, proactive right of way acquisition, and increased coordination with local planning. The objective is to obtain more capacity from the existing system.

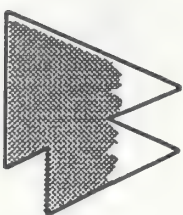
Preservation of the passenger transportation system would retain: existing levels of Amtrak service, the essential air services subsidy program, transit and intercity bus service.

Preservation of the freight system would involve no further loss of rail branch lines and continuing to work with the freight industry to ensure that there are no impediments to the efficient shipment of goods.



# Exhibit 13: Objectives for Achieving the Preferred Future

Preserving the Existing System Through:	Improving Intermodal Connectivity Through:	Protecting the Environment Through:	Making the System Multimodal Through:
<input type="checkbox"/> Prioritizing pavement preservation <input type="checkbox"/> Implementing access management <input type="checkbox"/> Proactive right-of-way acquisition <input type="checkbox"/> Coordinating with local planning	<input type="checkbox"/> Improvements to intermodal facilities <input type="checkbox"/> Coordination with Amtrak <input type="checkbox"/> Enhancing highway connections	<input type="checkbox"/> Increased coordination with other agencies <input type="checkbox"/> Multimodal solutions	<input type="checkbox"/> Incorporating bicycles, pedestrians and transit on highways <input type="checkbox"/> Funding rural transit <input type="checkbox"/> Encouraging public transportation use
Maintaining Mobility - Addressing Growth Through:	Supporting Economic Development Through:	Managing Limited Funds Effectively Through:	Supporting Social Goals Through:
<input type="checkbox"/> Access management <input type="checkbox"/> Modernization and safety improvements <input type="checkbox"/> Addressing corridor-level congestion <input type="checkbox"/> Multimodal solutions, bicycle, pedestrian, transit	<input type="checkbox"/> Tourism related enhancements <input type="checkbox"/> Branchline preservation <input type="checkbox"/> Coordination of investment <input type="checkbox"/> Maintaining air service	<input type="checkbox"/> Ensuring investments implement policy and planning priorities <input type="checkbox"/> Using ISTEA management systems <input type="checkbox"/> Balancing funds between preservation, modernization and safety	<input type="checkbox"/> Funding transit <input type="checkbox"/> Maintaining community character <input type="checkbox"/> Ensuring basic mobility





## **Maintaining mobility - addressing growth**

Preservation of the system will be balanced with maintaining acceptable levels of service. The greatest need is in the fastest growing parts of the state. TranPlan 21 ensures that freight and passenger mobility in Montana keeps pace with travel demands arising from population and economic growth. Parts of western Montana have experienced declines in mobility due to traffic growth. TranPlan 21 recognizes that it is in the entire state's interest to address travel demands arising from growth. The preferred future is one in which there is no further degradation of mobility and current corridor level congestion is addressed.

The most cost effective strategies for maintaining acceptable levels of service will be employed. This includes transportation systems management actions such as access management, coordination with local land use planning, and determining whether demand side actions such as transportation demand management would help maintain mobility. The emphasis will be upon gaining as much mobility as possible from the existing system and as necessary making capacity and modernization improvements to address growth.

## **Making the system multimodal**

TranPlan 21 sets Montana on the path toward making the transportation system multimodal. Coordinating with

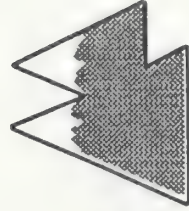
urban area planning and local jurisdictions, MDT will continue to ensure that improvements to the highway system reflect the use of that system by public transportation and bicyclists. In urban areas, highway improvements will support locally established priorities for safe and pedestrian friendly infrastructure.

The state will expand its role in funding transit to provide an additional allocation of funding for rural transit systems and enable urban areas to use urban highway system funds for transit if they choose. MDT will promote and encourage the use of public transportation, and the consideration of demand management, especially in the urban areas.

## **Improving intermodal connections**

Improved intermodal connections is a key element of Montana's preferred future transportation system. This will increase the efficiency of the system and improve the attractiveness of passenger transportation. The most effective role identified for the state is assisting with improvements to intermodal passenger facilities, enhancing highway connections to facilities, and incorporating intermodal considerations into urban area planning.

The state will ensure highway access to intermodal freight terminals that can accommodate the expected growth in intermodal freight. Improved access to airports will be planned for.



## Supporting economic development

Transportation system management and development will support the needs of Montana's basic industries and provide the transportation infrastructure that will support tourism, value-added manufacturing, and increased international trade. Preserving the system will ensure that the highway system continues to connect Montana's industries to state, national, and international markets. New economic development will be supported through: tourism related enhancements, working to preserve rail branchlines and air transportation services, and improved coordination with state and local economic development agencies.

## Supporting social goals

The transportation system will continue to play an important social role. Transit service will ensure that the disabled and the growing numbers of elderly have a basic level of mobility. In approaching improvements, the state will continue to place emphasis on maintaining quality of life and community character.

## Protecting the environment

Protecting the environment, while managing the existing system and meeting new transportation demands is an important objective for implementing TranPlan 21. The quality of Montana's natural environment is valued by its citizens and is important to the state's future economic well being. Environmental protection can be accomplished by

working with the agencies involved in regulation and permitting, early on in planning and project development.

## Highway System Policy Goals and Actions

Policy goals and actions for the highway system are listed in Exhibit 14.

**Policy Goal 1.** Establish Explicit Priorities for Roadway Improvements.

First Priority - Preservation of Existing System

Second Priority- Safety Improvements

Third Priority - Capacity Expansion

- This policy goal establishes an explicit framework for prioritizing projects and developing the Statewide Transportation Improvement Program. In implementing TranPlan 21, the programming process will establish a balance between funding these different priorities for roadway improvements. This will be accomplished using the ISTEA management systems to provide the analytical basis for establishing funding goals for the different priorities.

**Action 1.1.** Establish a process for ensuring project selection reflects policy and planning goals.





## Policy Goals

## Actions

1.1 Establish a process for ensuring project selection reflects policy and planning goals.

1. Establish Explicit Priorities for Roadway Improvements

First Priority - Preservation of Existing System

Second Priority - Safety Improvements

Third Priority - Capacity Expansion

2. Preserve Interstate and Primary System Pavement at Existing Levels or Better. Establish Goals for Improving Secondary System Pavement Conditions

2.1 Use the pavement and bridge management systems as planning, engineering and programming tools.

2.2. Use the pavement management system to help local jurisdictions understand their pavement needs.

2.3 Regularly update the cost allocation study to ensure equity in user fees and include analysis of secondary system use.

2.4 Monitor the impacts of the North American Free Trade Agreement (NAFTA) upon Montana's transportation facilities.

2.5 Establish maintenance standards and goals to complement the geometric design standards.

2.6 Provide and disseminate transportation system preservation and maintenance information.

3. Systematically Modernize Highway Infrastructure

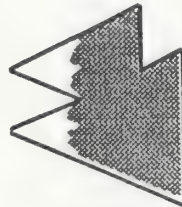
3.1 Use existing geometric design standards.

3.2 Establish criteria (goals and standards) to determine reconstruction and capacity needs.

3.3 Undertake proactive right of way preservation in congested corridors.

3.4 Work with local jurisdictions to preserve right of way.

3.5 Use ISTEAs management systems to coordinate maintenance and construction work.



Montana Department of Transportation



# Exhibit 14: Highway System

## Policy Goals

## Actions

### 4. Enhance the Multimodal Role of the Roadway System

- 4.1 Consider public transportation needs in updates to the geometric design standards.
- 4.2 Use the Congestion Management System to identify corridors where public transportation could reduce the need for capacity improvements.
- 4.3 Identify criteria and locations for transit supportive design.

### 5. Identify and Deploy Cost-Effective Intelligent Transportation System Applications

- 5.1 Develop an Intelligent Transportation Systems plan.
- 5.2 Encourage urban area plans to consider intelligent transportation systems.

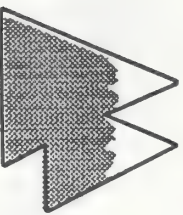
### 6. Improve Construction and Maintenance Techniques and Materials

- 6.1 Continually review maintenance procedures for efficiency and effectiveness improvements.
- 6.2 Review procedures for testing and accepting maintenance materials to ensure quality.

- This action involves establishing a task force involving headquarters staff and District Engineers to develop criteria and a process that will tie project selection decisions to planning and policy goals. There will be coordination between state and urban area planning goals in developing the project selection process and criteria.

**Policy Goal 2. Preserve Interstate and Primary System Pavement at Existing Levels or Better. Establish Goals for Improving Secondary System Pavement Conditions.**

TranPlan 21 analysis indicates that the interstate and primary system has pavement conditions that are fair or better. However, there is no information from which to



evaluate pavement conditions on the secondary system. MDT is developing a Pavement Management System that is expected to show that an increased level of investment in early and frequent routine maintenance is desirable in order to reduce life cycle costs and increase life-cycle benefits. This assumption, is consistent with engineering research and previous statewide studies. Preservation needs and practice will be revisited when the Pavement Management System is on-line and providing reports. This policy goal is implemented through actions that will preserve and improve the existing conditions on the interstate and primary system and establish goals for the secondary system.

**Action 2.1.** Use the Pavement and Bridge Management systems as planning, engineering and programming tools.

- The Pavement Management System will become an extremely powerful tool to help MDT make better decisions. It will utilize life-cycle costing and provide the information needed to balance preservation and modernization in the improvement program. The Pavement Management System will be used to define strategies and funding levels that will maintain existing pavement performance.

**Action 2.2.** Use the Pavement Management System to help local jurisdictions understand their pavement needs.

- Currently there is little information about secondary system pavement conditions. MDT will work with the counties to improve data and use the Pavement

Management System to help counties make better preservation decisions in selecting secondary system projects and spending their funds off system.

**Action 2.3.** Regularly update the cost allocation study to ensure equity in user fees and include analysis of secondary system use.

- The cost allocation study which ensures equitable fees for highway use will be updated periodically. Future updates will address secondary system use and international trade.

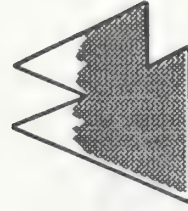
**Action 2.4.** Monitor the impacts of the North American Free Trade Agreement (NAFTA) upon Montana's transportation facilities.

- There is an expectation of increased shipments between Canada and the United States through Montana. Close attention will be paid to monitoring the extent of traffic growth and associated infrastructure needs.

**Actions 2.5.** Establish maintenance standards and goals to complement the geometric design standards.

- Goals and criteria will be used to trigger maintenance improvements. Pavement conditions, accident history and other safety considerations will be included as factors in targeting maintenance resources.

**Action 2.6.** Provide and disseminate transportation system preservation and maintenance information.





Frequently, there is public pressure to make investments which are not cost effective. In simple terms the argument is "do the worst first." This is not the most cost effective practice. A continuous communications program which educates the public and transportation stakeholders about the transportation program will help increase understanding and cooperation for cost effective strategies.

**Policy Goal 3.** Systematically Modernize Highway Infrastructure.

MDT will modernize Montana's highway system as part of the cycle of reconstruction, safety improvements, and through the investments that are necessary to address growth. The following actions ensure cost effective modernization.

**Action 3.1.** Use existing geometric design standards.

- The Geometric Design Standards used by MDT were developed in 1991 and involved scaling back many of the design goals.

**Action 3.2.** Establish criteria (goals and standards) to determine reconstruction and capacity needs.

- Many of Montana's highways will continue to have low traffic volumes. These criteria could be used to avoid "over building" in corridors where current and forecast volumes do not warrant capacity expansion. The ISTEA management systems will provide the data required to measure these goals

and criteria. The specific criteria can be used in the project selection process.

**Action 3.3.** Undertake proactive right of way preservation in congested corridors.

- TranPlan 21 identified current and future congestion and level of service degradation in Montana's major corridors. This action ensures active right of way preservation is targeted in corridors that are likely to have the greatest need for capacity related improvements over the next twenty years.

**Action 3.4.** Work with local jurisdictions to preserve right of way.

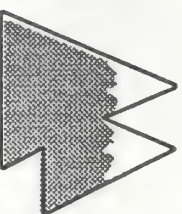
- This action involves working with local jurisdictions to ensure that their decisions do not impact right of way preservation.

**Action 3.5.** Use ISTEA management systems to coordinate maintenance and construction work.

- Maintenance work and construction work will be coordinated so that a section of road is not worked on twice within a short period of time.

**Policy Goal 4.** Enhance the Multimodal Role of the Roadway System.

This policy ensures that highway modernization accounts for the multimodal role of roadways in Montana. (Other actions that further this policy goal are included





under Public Transportation and the Bicycle and Pedestrian Transportation.

**Action 4.1.** Consider public transportation needs in updates to the geometric design standards.

- Future updates to the geometric design standards will establish criteria for accommodating public transportation, providing, infrastructure that can support modal trade-offs, and increasing ride sharing on the highway system.

**Action 4.2.** Use the Congestion Management System to identify corridors where public transportation could reduce the need for capacity improvements.

- As population grows in western Montana and in urban areas, the potential for modal trade-offs will increase. This action will use the Congestion Management System to identify where there will be future potential for modal trade-offs and highlight these corridors and facilities in future updates to the geometric design standards.

**Action 4.3.** Identify criteria and locations for transit supportive design.

- Criteria and guidelines for transit supportive design in areas where future transit use is anticipated will be developed. This will require working with transit system operators to identify any high volume locations where bus turn-outs or other transit supportive design features are justified. This could

also include locating park-and-ride or park-and-pool lots.

**Policy Goal 5.** Identify and Deploy Cost Effective Intelligent Transportation System (ITS) Applications.

In considering this policy goal, it is important to note that TranPlan 21 is a 20 year plan. In this time frame ITS applications will most likely be developed, tested, and deployed nationally. While many ITS solutions appear far-fetched with limited applicability to Montana, there is a high expectation that their application could improve safety and system efficiency and reduce physical construction needs.

**Action 5.1.** Develop an Intelligent Transportation Systems plan.

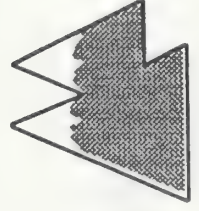
- MDT will work with Montana State University to evaluate the applicability of ITS to Montana.

**Action 5.2.** Encourage urban area plans to consider intelligent transportation systems.

- MPOs are encouraged to consider ITS applications in their long range planning.

**Policy Goal 6.** Improve Construction and Maintenance Techniques and Materials.

MDT will continue to improve construction and Maintenance techniques and materials to optimize return on expenditures and improve the service life of the highway infrastructure. Improved techniques will provide a higher



quality product, which is essential in realizing the full benefits of early routine maintenance procedures.

**Action 6.1.** Oppose increases to MDT's maintenance responsibilities.

- Montana must be careful in not increasing the state's maintenance responsibilities. They involve ongoing annual expenditures which are not federally funded. The state can not afford to increase its maintenance responsibilities on lower functional classification roadways.

**Action 6.2.** Continually review maintenance procedures for efficiency and effectiveness improvements.

- MDT will continue to review maintenance procedures and make changes to procedures if necessary.

**Action 6.3.** Review procedures for testing and accepting maintenance materials to ensure quality.

- MDT will continue to ensure that high quality maintenance materials are used.

## Freight Mobility Policy Goals and Actions

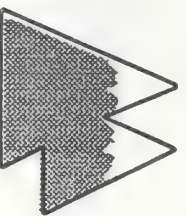
Policy goals and actions for freight mobility are listed in Exhibit 15.

## Exhibit 15: Freight Mobility Policy Goals

### Actions

7. Ensure Efficient Highway Freight Mobility

- 7.1 Monitor highway freight corridors and prioritize improvements in these corridors.
- 7.2 Identify and address impediments to efficient freight movements in highway freight corridors.
- 7.3 Ensure freight corridors are addressed in urban area transportation plans.
- 7.4 Work with local, federal, and Canadian governments to ensure Montana's border crossing needs are met.



## Policy Goals

## Actions

### 8. Ensure a Balanced Freight Transportation System

- 8.1 Prevent the further loss of rail branch lines through working with the railroad industry.
- 8.2 Identify and address priority grade separation needs.
- 8.3. Retain existing rights of way in rail corridors.
- 8.4 Work with airport operators to maintain, preserve, and improve the level of commercial air service.

### 9. Improve Intermodal Connectivity Through Increasing the use of Intermodal Freight Facilities

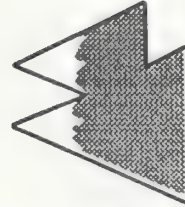
- 9.1 Encourage the use and improve the performance of intermodal terminals.
- 9.2 Encourage use of existing truck/rail reload facilities.
- 9.3 Involve shippers and private sector providers to improve understanding of freight needs.
- 9.4 Include freight access in statewide airport system planning.
- 9.5 Ensure MDT has in-house expertise to address freight issues associated with Interstate Commerce Commission requirements.

### Policy Goal 7. Ensure Efficient Highway Freight Mobility.

Efficient highway freight mobility will be ensured through the following actions.

**Action 7.1.** Monitor highway freight corridors and prioritize improvements in these corridors.

- TranPlan 21 identifies primary freight corridors which will be monitored through the Intermodal Management System. Based on current traffic counts, the corridors would include all current highway routes with over 500 commercial vehicles per day. The current and forecast performance of these corridors would be monitored.



Montana Department of Transportation



**Action 7.2.** Identify and address impediments to efficient freight movements in highway freight corridors.

- As part of IMS implementation, MDT will monitor impediments to overall freight mobility in these corridors. The focus would be on the entire trip from origin to destination within the state. Impediments would include regulatory and procedural as well as those relating to the physical infrastructure.

**Action 7.3.** Ensure freight corridors are addressed in urban area transportation plans.

- Montana's highway and rail transportation system passes through many different jurisdictions. While the MDT can plan for development within its right of way, abutting land is subject to local, tribal, and federal planning that has direct impacts upon the transportation system. MDT should seek to ensure that freight is addressed in urban area transportation planning.

**Action 7.4.** Work with local, federal, and Canadian governments to ensure Montana's border crossing needs are met.

- Montana has three 24-hour ports of entry, two seasonal ports of entry, and ten other points of entry that are not open 24-hours. This action involves Montana working with federal, local, and Canadian provincial governments to ensure border crossing needs are met.

**Policy Goal 8.** Ensure a Balanced Freight Transportation System Through Preservation of the Existing Rail and Air Transportation System.

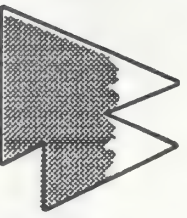
Montana has already experienced a significant amount of branch line abandonment and loss of air service.

**Action 8.1.** Prevent the further loss of rail branch lines through working with the railroad industry to facilitate the preservation of branch lines.

- When branch lines are abandoned, they are usually in poor condition because of deferred maintenance. This action involves the state, through MDT acting as a facilitator, bringing together the main line and the short line operators to identify lines which might be abandoned by the main line operator. The objective would be to facilitate the transfer of the branch lines to operators with lower cost structures, before there is a backlog of deferred maintenance. This action would help retain branch lines which could be operated by short line and regional operators at no cost to the public.

**Action 8.2.** Identify and address priority grade separation needs at busy railroad crossings.

- Montana has numerous grade crossings throughout the state. This action involves identifying priority grade separation needs. Grade separation for safety purposes can be funded through the safety program in ISTEA.



**Action 8.3.** Retain existing rights of way in rail corridors.

- Past rail branch line abandonments often resulted in loss of rights of way. MDT will actively pursue the retention of railroad rights of way for transportation and recreational uses.

**Action 8.4.** Work with airport operators to maintain, preserve, and improve the level of commercial air service.

- The provision of air freight service is largely a product of private market forces. This action involves MDT working with airport operators to try and minimize any future air service reductions.

**Policy Goal 9.** Improve Intermodal Connectivity Through Increasing the use of Intermodal Freight Facilities.

Montana has well established facilities for the intermodal transfer of trailers and containers onto flatcars. There is concern that the provision of additional capacity would result in an over supply which would be to the detriment of intermodal facility operators. Therefore, policy actions do not identify state roles in the provision of additional facilities.

**Action 9.1.** Encourage the use and improve the performance of intermodal terminals with open access to enable efficient transfers between modes.

- This action involves encouraging the use and improving the performance of existing intermodal facilities. Intermodal terminals are included as

facilities of statewide importance in **ITRIP rail 2.1.** The routes connecting these facilities to the highway corridors are also included. The Intermodal Management System will identify any deficiencies in these connectors, their impact on freight transportation, and help to identify any project needs.

**Action 9.2.** Encourage use of existing truck/rail reload facilities.

- This action involves encouraging the transfer of grain, lumber products and other bulk commodities from truck to rail as early as possible. If successful, this would increase the utilization of branch lines and reduce the impacts of truck traffic on pavement conditions.

**Action 9.3.** Involve shippers and private sector providers to improve understanding of freight needs.

- Freight transportation is provided and used by private industry. To better understand existing and emerging freight trends and needs, MDT will obtain input directly from freight transportation providers, operators, and customers.

**Action 9.4.** Include freight access in statewide airport system planning.

- Intermodalism extends beyond rail and truck freight. High value air freight requires intermodal considerations. Surface transportation access to



# Exhibit 16: Access Management and Land Use

## Policy Goals

## Actions

### 10. Improve Corridor Level Access Management to Preserve the Highway System

- 10.1 Establish an access management classification scheme
- 10.2 Inventory and refine the methods, and ensure that there is adequate authority to implement access management.
- 10.3 Communicate the performance benefits from access management.

### 11. Establish Travel Demand Forecasting Capability to Support Access Management

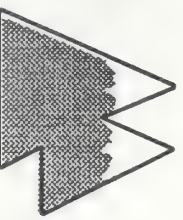
- 11.1 Use the TranPlan 21 forecasting method to identify the need for access management
- 11.2 Encourage improvement to urban area travel demand forecasting

### 12. Encourage local jurisdictions to establish land use planning and permitting mechanisms to manage transportation demand

- 12.1 Work with local jurisdictions to include land use and access management strategies in urban area transportation plans.
- 12.2 Work with the urban areas to develop consistent land use driven travel demand forecasting capability.
- 12.3 Participate in a working group of the Department of Commerce and representatives of affected local jurisdictions to develop legislative recommendations.
- 12.4 Consistently apply MDT's existing development review authority.
- 12.5 Encourage state agencies to consider transportation demands when locating new capital facilities and leasing new property.

### 13. Provide Authority to Enable Local Jurisdictions and MDT to Require Developer Contributions to Improvements

- 13.1 Establish a defensible mechanism for determining transportation costs to be paid by the developer





airports will be addressed as part of Montana's statewide airport system planning.

**Action 9.5.** Ensure MDT has in-house expertise to address freight issues associated with Interstate Commerce Commission requirements.

- This action will ensure that the MDT has the modal expertise to address shippers issues concerning interstate and international transport. These regulations and policies are complex and Montana's producers frequently have issues that need addressing with in-house expertise. The MDT would be able to ensure rapid response to outside requests for assistance.

## Access Management and Land Use

**Policy Goal 10.** Improve Corridor Level Access Management to Preserve the Highway System.

Access management will be an important component of transportation system management and preservation. Considerable benefits will derived from the consistent application of comprehensive access management. The primary purpose is to maintain the functional integrity and safety of the state highway system through access management and corridor preservation.

**Action 10.1.** Establish an access management classification scheme that defines the appropriate level of access and access control for different classes of state roadway according to functional classification, existing level of access, and surrounding land use.

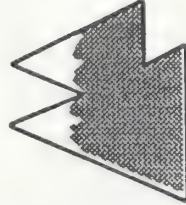
- This action will involve modifying the current Access Management Plan to provide more clear guidance to MDT staff on implementation, and emphasize sharing of responsibility with local jurisdictions.

**Action 10.2.** Inventory and refine the methods, and ensure that there is adequate authority to implement access management.

- MDT will establish approved technical methods for managing access to the highway. These will distinguish between those methods appropriate for different classes or facilities, urban versus rural areas, and areas with differing levels of existing access and land development. The action will include identifying additional authority required, and sponsoring if necessary legislation, to provide the tools for corridor preservation.

**Action 10.3.** Communicate the performance benefits from access management.

- This action addresses the inevitable resistance that will meet a more aggressive access management program. Affected land owners, merchants, and others who may fear access management need to be educated about the longer-term advantages of



managed access, and the implications of a continuation of relatively unrestrained access.

**Policy Goal 11. Establish Travel Demand Forecasting Capability to Support Access Management.**

This policy will establish the tools and capability to support access management. These tools can be used to demonstrate, where the conditions warrant, that maintaining the function of a highway through access management may be more cost effective than widening, even after taking economic or other impacts into consideration.

**Action 11.1.** Use the TranPlan 21 forecasting method to identify the need for access management.

- The TranPlan 21 travel forecasting method and the Congestion Management System will provide the starting point to anticipate areas and facilities in need of access management actions.

**Action 11.2.** Encourage improvement to urban area travel demand forecasting.

- Improved urban area travel forecasting models will allow MDT and MPOs to specifically test the impacts upon capacity of additional development and access to the state system.

**Policy Goal 12.** Encourage local jurisdictions to establish land use planning and permitting mechanisms to manage transportation demand through building their planning capacity.

MDT recognizes the importance of coordinating land use and transportation planning, the policy goal is to encourage local jurisdictions to undertake land use planning that can aid transportation system management, demand management, and reduce infrastructure costs.

**Action 12.1.** Work with local jurisdictions to include land use and access management strategies in urban area transportation plans.

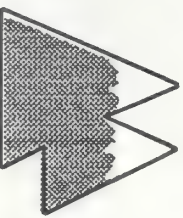
- MDT will work with local jurisdictions to establish and implement a consistent approach for including land use and access management strategies in urban area and MPO plans receiving state funding.

**Action 12.2.** Work with the urban areas to develop consistent land use driven travel demand forecasting capability.

- The travel demand modelling for the three MPO planning areas and Helena, Butte, Bozeman and Kalispell will be further developed. This will involve completing land use inventories and reflecting recent land use changes.

**Action 12.3.** Participate in a working group of the Department of Commerce and representatives of affected local jurisdictions to develop legislative recommendations for the 55th Legislature.

This action involves MDT proposing a multiagency and multi-jurisdictional working group to develop legislative recommendations for land use planning that would





involve the Montana Association of Counties, and the League of Cities and Towns.

**Action 12.4.** Consistently apply MDT's existing development review authority to include the cost of resulting transportation system improvements.

- Currently MDT and local jurisdictions have the authority to review sub-division development proposals prior to permitting. This action would establish a consistent set of approval guidelines to be addressed in approving development for major traffic generators that specify the required transportation improvements.

**Action 12.5.** Encourage state agencies to consider transportation demands when locating new capital facilities and leasing new property.

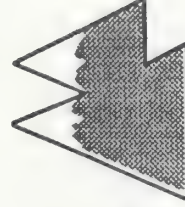
- This action would encourage the Department of Administration, the Long Range Building Committee, and state agencies, universities and colleges to coordinate the location and design of new facilities with local land use planning to better manage transportation demands that arise from these work sites.

**Policy Goal 13.** As part of the development review process provide authority to enable local jurisdictions and MDT to require developer contributions to improvements that accommodate new traffic demands.

To implement the policy will involve establishing statutory authority for local jurisdictions and possibly the MDT to levy traffic impact fees for improvements adjacent to new development.

**Action 13.1.** Establish a defensible mechanism for determining transportation costs to be paid by the developer.

- A mechanism that involves local jurisdictions and the MDT, for highways on the state systems, in determining the impact on the link or segment of roadway next to proposed development will be developed. The mechanism would involve the following steps: identifying existing traffic volumes on the segment of roadway and then estimating the traffic volume to be generated by the new development. The link capacity is then calculated using the level of service standard adopted by the local jurisdiction or the state. The current link capacity is then compared to the traffic volume arising from the proposed development. If traffic growth can not be accommodated at the accepted level of service then developer improvements would be required to correct the deficiency.





# Exhibit 17: Public Transportation

## Policy Goals

## Actions

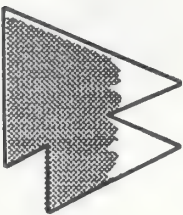
### 14. Promote and Support Increased use of Public Transportation Systems

- 14.1 Support local promotional/educational programs.
- 14.2 Ensure highway improvements address public transportation needs.
- 14.3 Provide state-level funding support for rural transit and transfer urban highway funds to transit at MPO's request.
- 14.4 Coordinate state planning, urban area and transit system planning.
- 14.5 Establish minimum transit service goals in cooperation with local agencies.

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### 15. Preserve Intercity Public Transportation Service and Encourage/Facilitate Provision of New Service

- 15.1 Work with intercity bus industry to identify cost effective state-level actions.
- 15.2 Evaluate costs and feasibility of funding intercity service in unserved areas.
- 15.3 Fund the implementation of a rural ridesharing demonstration program.
- 15.4 Work to improve publicly owned intermodal passenger facilities.
- 15.5 Coordinate with Amtrak to facilitate increased use of rail and preservation of existing service.
- 15.6 Evaluate intermodal passenger connections.
- 15.7 Ensure Montana's interests in expanded passenger rail are addressed in any national decision making.



# Exhibit 17: Public Transportation

## Policy Goals

## Actions

16. Work to Improve Service to Social Service Passengers and the Transportation Disadvantaged

- 16.1 Improve state agencies and local provider cooperation in funding coordination.
- 16.2 Establish a statewide coordinating council to increase budget flexibility.
- 16.3 Work with the Public Service Commission to facilitate easier entry into passenger service provision.

17. Identify and Implement Transportation Demand Management Actions Applicable to Montana

- 17.1 Encourage urban area plans to evaluate and implement demand-side strategies.
- 17.2 Work with other state agencies to develop a TDM program for state government.

## Public Transportation

Policy Goal 14. Promote and Support Increased use of Public Transportation Systems.

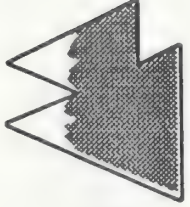
TranPlan 21 establishes policy direction for making Montana's transportation system multimodal through funding, planning, and promoting transit use.

Action 14.1. Support local promotional/educational programs to publicize public transportation opportunities.

- MDT will support local efforts to publicize the availability of public transportation and encourage its use. A major emphasis will be to educate potential riders on how to use the available services and about their safety, reliability, and convenience.

Action 14.2. Ensure highway improvements address public transportation needs.

- This action involves consideration of transit infrastructure needs as part of advance project planning and design. Inclusion of public transportation in the initial stages of urban highway



improvement projects allows public transportation to function as an integral part of the area's transportation network and reduces the need for expensive and disruptive retrofit of the street and highway network.

**Action 14.3.** Provide state-level funding support for transit through providing a fixed amount of funding for rural transit systems "off the top" of STP funds. Transfer urban highway funds to transit at the request of urban areas.

- MDT will use the flexible funding provision in ISTEA to finance eligible rural transit system projects through an "off the top" allocation of Surface Transportation Program funds. It is important to note that these provisions only apply to capital and not operating costs and require a local match. In addition, urban areas may choose to transfer Urban Highway System funds to transit projects.

Federally eligible transit-related uses for STP include: capital costs for transit projects and publicly owned bus terminals or facilities, transit safety improvements, car pool and van pool projects, and most transportation control measures in the clean air act.

**Action 14.4.** Coordinate state planning, urban area, and transit system development planning and management.

- Further coordination between planning and management of the highway and transit systems will

be achieved by increasing transit agency participation in urban area planning and encouraging transit development planning to identify any associated highway improvements necessary for enhancing transit.

**Action 14.5.** Establish minimum transit service goals in cooperation with local agencies.

- MDT in cooperation with transit providers will develop minimum service goals against which performance and transit need can be measured.

**Policy Goal 15.** Preserve Intercity Public Transportation Service and Encourage/Facilitate Provision of New Service.

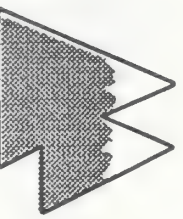
Intercity bus provides a key statewide function. The state has a policy and planning role in encouraging and facilitating intercity bus service.

**Action 15.1.** Work with intercity bus industry to identify cost effective state-level actions for preserving existing service.

- MDT will work with the providers to identify the most effective actions open to state government to preserve the existing service.

**Action 15.2.** Evaluate costs and feasibility of funding intercity service in unserved areas.

- MDT will evaluate the costs and feasibility of state intervention to fund the provision of service. This





includes consideration of contracting with existing providers (public or private), purchasing vans for intercity service, and other options.

**Action 15.3.** Fund the implementation of a rural ridesharing demonstration program.

- MDT will fund a ride sharing demonstration program. The effectiveness of the program in improving rural mobility will be evaluated.

**Action 15.4.** Work to improve publicly owned intermodal passenger facilities.

- Improvements to passenger rail and intercity bus facilities will be considered for funding. Many of the state's rail and bus stations are in poor condition. Improvements can make the use of public transportation more attractive. The action would require working with Amtrak, airports, and intercity bus providers.

**Action 15.5.** Coordinate with Amtrak to facilitate increased use of rail and preservation of existing service levels.

- This action involves establishing a working relationship with Amtrak to identify state actions which can increase the use of Amtrak and preserve the existing levels of service. There has been a trend decrease in passengers using stations in eastern

Montana and this action will try to ensure that service is retained at these stations.

**Action 15.6.** Evaluate intermodal passenger connections using existing bus, train, or airline terminals.

- Opportunities to improve existing facilities for shared use by more than one mode and service provider will be identified. This could include the coordination of schedules and ticketing procedures, and integrated baggage handling facilities for ease of interline and multimodal use.

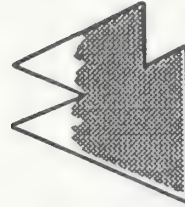
**Action 15.7.** Ensure Montana's interests in expanded passenger rail are addressed in any national decision making concerning increased Amtrak service.

- This action involves tracking national initiatives to increase passenger rail and ensuring that Montana's interest in east-west service across the southern tier of the state is addressed.

**Policy Goal 16.** Work to Improve Service to Social Service Passengers and the Transportation Disadvantaged - the Elderly, Children at Risk, Low Income, and the Disabled Through Interagency Coordination.

Transit for the elderly and disabled plays an important social role. TranPlan 21 works towards improving this service.

**Action 16.1.** Improve state agencies' and local provider cooperation in funding coordination.



# Exhibit 18: Bicycle and Pedestrian Transportation

## Policy Goals

### 18. Institutionalize Bicycle and Pedestrian Modes

## Actions

18.1 Develop the state bicycle and pedestrian program.

18.2 Work with the Department of Commerce to prepare a bicycle and pedestrian guide.

18.3 Assist local governments to provide transportation facilities.

18.4 Prepare and disseminate public safety announcements.

18.5 Encourage safety management system steering committee to use the system to provide bicycle and pedestrian safety information.

18.6 Encourage safety management system steering committee to educate motorists on safe interaction with bicyclists and pedestrians.

### 19. Target Bicycle-related and Pedestrian Improvements

19.1 Identify most significant bicycle routes through urban area plans and rural "touring routes".

19.2 Establish a consistent planning approach and design guidelines for incorporating bicycle and pedestrian facilities in highway projects.

19.3 Consider bicycle improvements based upon proven and/or expected use.

19.4 Improve bicycle and pedestrian facilities through incorporation into existing projects.

19.5 Make selected bicycle improvements in urban areas as congestion mitigation and air quality improvement strategy.

19.6 Adopt and implement consistent bicycle friendly maintenance standards, where feasible.



- State agencies will be asked to report expenditures on passenger transportation to identify any opportunities for coordinating social service passenger transportation programs.

**Action 16.2.** Establish a statewide coordinating council to increase flexibility in budgets and budgeting processes so that transportation providers can more easily access and coordinate available funds.

- Various state, local, and non-profit social service organizations provide transportation services beyond those funded through MDT's administration of federal grants. Statewide coordination will provide a mechanism for avoiding duplication of funding and overlapping functions to increase utilization of existing equipment and improve service.

**Action 16.3.** Work with the Public Service Commission to facilitate easier entry into passenger service provision (especially Medicaid transportation).

- The action would identify opportunities for reducing regulations, without jeopardizing safety and reliability, and streamline procedures for entry into service provision.

**Policy Goal 17.** Identify and Implement Transportation Demand Management (TDM) Actions Applicable to Montana.

TranPlan 21 includes policies and actions that plan for a multimodal transportation system. Use of public trans-

portation, walking, and bicycling all can help reduce traffic growth. On the demand side identifying other TDM actions that can work in Montana is a policy goal.

**Action 17.1.** Encourage urban area plans to evaluate and implement demand-side strategies.

- This action supports existing planning efforts and will encourage Montana's urban areas to work with the transit systems to identify and include demand-side strategies applicable in Montana as part of their urban area planning.

**Action 17.2.** Work with other state agencies to develop a TDM program for state government.

- MDT will take a leadership role by determining the most effective potential approaches for state employees and then implementing these over the next decade. State government is the largest employer in Helena and has many single large employment sites that are conducive to TDM. The TDM program could be incorporated as an element of any updates to the Helena urban area plan.





# Bicycle and Pedestrian Transportation

**Policy Goal 18.** Institutionalize Bicycle and Pedestrian Modes.

MDT will continue to improve bicycle and pedestrian facilities and work to institutionalize this mode of travel in Montana.

**Action 18.1.** Develop the State Bicycle and Pedestrian program at an increased staffing level with the following elements:

- A coordinator with responsibilities for planning and assisting with implementation. This would include coordination with related state and local government planning efforts.
- A program of training and assistance to staff within the Department to address needs of non-motorized modes.
- Coordination with related state planning efforts including State Department of Fish Wildlife and Parks (FW&P), State Lands, and Department of Natural Resources and Conservation (DNRC).
- Developing a state wide bicycle/pedestrian plan that will implement the related goals and objectives of TranPlan 21.

**Action 18.2.** Work with the Department of Commerce to prepare a bicycle related tourist guide.

- The potential of joint funding and obtaining private sector funding, or publishing the routes as part of Montana's regional tourist profiles, will be examined. The growing popularity of recreational bicycling offers a good tourism-related economic development opportunity for Montana.

**Action 18.3.** Assist local units of government to provide transportation facilities that encourage or consider the use by bicyclists and pedestrians.

- MDT will continue to help local jurisdictions to address their bicycle needs more effectively.

**Action 18.4.** Prepare and disseminate public service announcements addressing bicycle and pedestrian safety.

- The MDT and the Office of Public Instruction (OPI) currently provide bicycle and pedestrian safety information. This action provides the opportunity to increase public awareness about bicycle and pedestrian safety.

**Action 18.5.** Encourage the safety management system steering committee to use the safety management system to provide information on bicycle and pedestrian safety.

- This action would involve reporting information on bicycle and pedestrian safety to aid in the designation



of the bicycle network and evaluation of any safety-related bicycle improvements. The safety management system will identify safety-related bicycle and pedestrian needs for consideration in project development, use by local jurisdictions and other agencies.

**Action 18.6.** Encourage the Safety Management System steering committee to undertake efforts to educate motorists on safely interacting with bicyclists and pedestrians.

- This action recognizes the importance of motor vehicle driver education in promoting safety. The results from the safety management system to provide input on bicycle and pedestrian safety to the Department of Justice.

**Policy Goal 19.** Target Bicycle-related and Pedestrian Improvements to Account for Urban, Rural and Regional Differences in Current and Future Use.

Bicycle and pedestrian improvements will be targeted based upon use, anticipated use, and in coordination with local planning.

**Action 19.1.** Identify the most significant routes designated through MPO and urban areas plans, and selected rural "touring routes" with greatest demand or potential demand as the basis for planning and system improvement decisions.

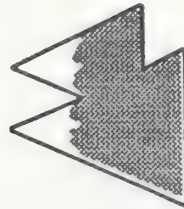
- MDT in cooperation with local jurisdictions will identify a network of bicycle routes for public information, planning and system improvement purposes. This will provide a basis to ensure that any bicycle related improvements can contribute to the development of an overall system and ensure that the level of development for bicycle facilities reflects anticipated future demand.

- The network will be based on identifying the most significant routes through the MPOs and in urban areas. These routes are in the process of being identified by local planning efforts. Outside of the urban areas, rural "touring routes" will be identified.

**Action 19.2.** Establish a consistent planning approach and design guidelines for incorporating bicycle and pedestrian facilities in highway improvement projects.

- Bicycle needs are considered as part of the current project development process. Establishing a consistent approach could help avoid system discontinuity and ensure that MDT does not provide a level of bicycle development which will not be used over the next 20 years. This action involves establishing a series of consistent guidelines for approaching bicycle facilities.

**Action 19.3.** In incorporated areas, unincorporated communities and reservations consider further bicycle improvements based upon proven use or expected future use.





- This action applies to urban and other areas (excluding the MPO and urban areas addressed by urban planning) it recognizes that in these areas there may be a need for bicycle facilities beyond accommodation on an existing shoulder. The nature of the facilities would depend on local conditions and demand. However objective criteria are needed in order to determine how bicycle facilities should be considered.

**Action 19.4.** Improve bicycle and pedestrian facilities in Montana through incorporation in existing projects.

- Unless there is a safety problem, bicycle improvements will be implemented only where they are part of existing or planned project improvements. For example, any rural principal arterial that did not have a shoulder would not be improved just to address bicycle needs. The bicycle needs would be addressed at the same time as major reconstruction.

**Action 19.5.** Make selected bicycle improvements in urban areas as a congestion management and air quality improvement strategy.

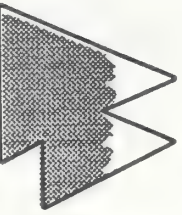
- This action recognizes that over the 20 year planning horizon there is some potential for the use of bicycles as part of an overall multimodal strategy for addressing congestion.

**Action 19.6.** Adopt and implement consistent bicycle friendly maintenance standards.

- This action involves reviewing overall design standards for rumble strips, drive approaches, cross walks, signage, drainage and so forth. A major area of interest raised by bicycle users was the question of rumble strips. Montana's new rumble strip policy which allows separation between motoring traffic and bicyclists will be better communicated.

## Supporting Economic Development

The policy goals and actions that support economic development are listed in Exhibit 18, below.





# Exhibit 18: Supporting Economic Development

## Policy Goals

20. Promote a transportation system that provides cost effective access for Montana's export oriented ("basic") industries to regional, national, and international markets.

## Actions

20.1 Work with shippers and private providers on a continuing basis to identify barriers and transportation improvements that will enhance access to regional, national, and international markets.

20.2 Prioritize support for "basic" industries as a criteria in programming and project selection.

20.3 Work with commercial air carriers to maintain and enhance existing levels of service.

21. Ensure state and local economic development policies, plans and priorities are factored into transportation planning and programming.

21.1 Conduct annual meetings with the Department of Commerce's regional development officers to discuss and review long-range plans, identify infrastructure concerns, and transportation impediments (if any).

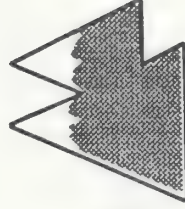
21.2 Factor state and local economic development program priorities into the programming process.

21.3 Establish a new city park and rest area program to encourage visitors to contribute to economic development.

22. Engage in multistate and regional initiatives that facilitate international trade.

22.1 Participate in examination of multistate trade corridor initiatives.

22.2 Coordinate with planning undertaken by Canadian Provincial Governments of Alberta and Saskatchewan.



# Exhibit 18: Supporting Economic Development

## Policy Goals

## Actions

23. Promote tourism and access to recreational, historical, cultural, and scenic destinations through transportation planning and programming.

23.1 Implement recommendations from the scenic byway feasibility study.

23.2 Prioritize and encourage the development of transportation enhancements that promote tourist access.

23.3 Encourage more tourist oriented directional signing and

23.4 Minimize negative impacts of billboards through implementing recommendations from the Governor's Outdoor Advertising Task Force.

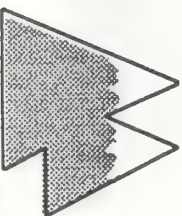
23.5 Consider maintaining community character that enhances tourism and local economic development as part of project evaluation.

**Policy Goal 20.** Promote a Transportation System that Provides Cost Effective Access for Montana's Export Oriented ("Basic") Industries to Regional, National, and International Markets.

Economic growth in Montana is dependent upon its export base. The MDT will seek to manage and develop a transportation system that guarantees "basic" export-oriented industries access to the regional, national and global marketplace.

**Action 20.1.** Work with shippers and private providers on a continuing basis to identify barriers and transportation improvements that will enhance access to regional, national, and international markets.

- Shippers and private transportation providers will be involved periodically to identify the most significant trade-corridor needs, regulatory constraints inhibiting transport, and other issues. By engaging in an ongoing process, the MDT will be able to adjust policies to reflect market needs.



**Action 20.2.** Prioritize support for "basic" industries as a criteria in programming and project selection.

- This involves considering the role the transportation system plays as an infrastructure supporting the basic sectors of the economy as a criteria in programming and project selection decisions.

**Action 20.3.** Work with commercial air carriers to maintain and enhance existing levels of service.

- MDT will work with airport operators and air carriers to identify service problems before they occur. A proactive approach to maintaining existing levels of air service is important to the state's economy because of the important economic role of air transportation.

**Policy Goal 21.** Ensure state and local economic development policies, plans and priorities are factored into transportation planning and programming.

This policy will support state and local economic development activities through the management and development of the transportation system.

**Action 21.1.** Conduct annual meetings with the Department of Commerce's regional development officers to discuss and review long-range plans, identify infrastructure concerns, and transportation impediments (if any).

- The action will increase MDT understanding of transportation-related economic development needs. By gaining a better understanding of local

and state-wide economic development issues, the MDT would be better able to assist in the facilitation of business retention and expansion. In turn, the Department of Commerce would better understand the MDT's planning and project development activities.

**Action 21.2.** Factor state and local economic development program priorities into the programming process.

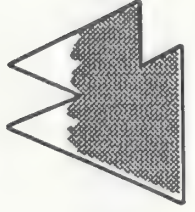
- This involves coordinating decision making for funding economic development and transportation improvements. To implement this recommendation it will be necessary to include contribution to economic development as a criterion for project selection or as part of the programming process.

**Action 21.3.** Establish a new city park and rest area Program to encourage visitors to contribute to economic development.

- The action involves initiating a new city park and rest area program. In the past this program was highly cost effective, producing indirect economic benefits to cities and towns. It involves the construction of rest-stop facilities in municipal areas, rather than in costly isolated locations.

**Policy Goal 22.** Engage in Multistate and Regional Initiatives that Facilitate International Trade.

The increased role of international trade in the national and Montana economy and the passage of the North





American Free Trade Agreement (NAFTA) increases the importance of integrating the state into the national and international economy.

**Action 22.1.** Participate in examination of multistate trade corridor initiatives.

- There are a number of competing trade corridor initiatives on a national and regional level sponsored by both public and private interests. Neighboring states are positioning themselves to compete for designation as an international trade corridor, MDT will collaborate in efforts with other states to determine the nature of demand for a corridor, weigh the benefits against the costs, and determine whether the development of trade corridors passing through Montana will be good for the state.

**Action 22.2.** Coordinate with planning undertaken by the Canadian Provincial Governments of Alberta and Saskatchewan.

- MDT will meet annually with transportation planners in the neighboring Canadian provinces. Planning and actions undertaken north of the United States border are important to Montana, especially if Canada becomes active in a trade corridor effort. System continuity would be ensured and planning actions coordinated to the extent possible.

**Policy Goal 23.** Promote Tourism and Access to Recreational, Historical, Cultural, and Scenic Destinations Through Transportation Planning and Programming.

Tourism continues to grow as a vital component of the Montana economy. The future growth of tourism will require a careful blend of planning and programming to ensure a compatible match of capacity and aesthetic appeal. Following are actions to support tourist-related economic development through the management of the transportation system.

**Action 23.1.** Implement recommendations from the scenic byway feasibility study.

- The scenic byways program will aid tourism.

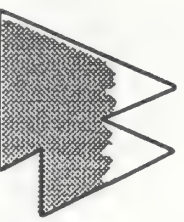
**Action 23.2.** Prioritize and encourage the development of transportation enhancements that promote tourist access.

- This action involves encouraging local jurisdictions to prioritize tourism-related transportation enhancements in the selection of Community Transportation Enhancement Program (CTEP) projects.

**Action 23.3.** Encourage more tourist oriented directional signing.

- This action involves assisting local communities to promote tourist attractions and local businesses.

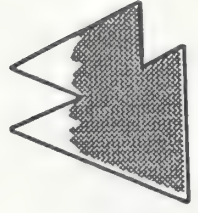
**Action 23.4** Minimize negative impacts of billboards through implementing recommendations from the Governor's Outdoor Advertising Task Force.

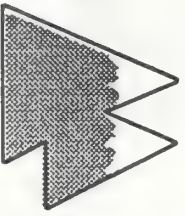


- Tranplan 21 recognizes that in a number of key transportation corridors there is a major problem from billboard proliferation. The billboards degrade the view shed and can negatively affect Montana's image and hence impact tourism. The Governor has established a task force to address these issues and this will provide a mechanism for addressing the billboard concerns identified through TranPlan 21.

**Action 23.5.** Consider maintaining community character that enhances tourism and local economic development as part of project evaluation.

- The image and nature of the business present in portions of tourist oriented communities is a key component of their success. To support economic development goals MDT will make efforts to incorporate these concerns into planning and programming so that the local economy of tourist towns is supported by transportation improvements.







# Financing the Transportation System

TranPlan 21 recognizes that for long-range planning to be successful, the incremental investments which are made to preserve and develop the transportation system should move the state towards its preferred future and implement the policy goals and actions. Implementation is constrained by current funding levels, the requirements of federal and state funding programs, and uncertainty about the likelihood that federal and state transportation funding will keep pace with inflation.

The transportation funding programs that will implement TranPlan 21 are described and the future level of revenue for preserving the system and addressing growth assessed.

## Transportation Funding Programs in Montana

Providing funding for highway improvement and maintenance is one of the key responsibilities of state government in Montana. Montana also plays a role in financing public transit, aviation, and freight rail.

TranPlan 21 will be primarily financed through programs authorized under the federal government's 1991

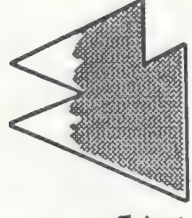
Intermodal Surface Transportation Efficiency Act (ISTEA) and through revenues raised by Montana. The ISTEA and state programs, are summarized in Exhibit 19. The size of each program is shown in Exhibit 20 which presents the highway improvement allocation for fiscal year 1994.

### Federal funds, ISTEA

Montana must match funds received from the federal government under ISTEA. Of the \$163.4 million Montana allocate to ISTEA projects in 1994, the federal government will contribute \$144.6 million that Montana will match with just under \$19 million of state revenues.

The programs that fund projects under ISTEA are described in turn:

**National Highway System (NHS).** National Highway System funds are dedicated to the improvement and maintenance of roads designated as part of the National Highway System. The interim National Highway System is currently being defined by the Congress. It will be the federal government's highest roadway priority in coming decades. The National Highway System will include Montana's portion of the Interstate system and about 2,700 miles of additional Montana roadway.



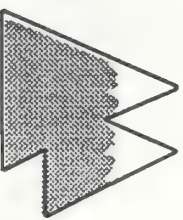
**Interstate Maintenance (IM).** The Interstate Maintenance program is for rehabilitation, restoration, resurfacing, and reconstruction of the Interstate highway system. Use of Interstate Maintenance funds includes the reconstruction of bridges, interchanges, and crossings over and under existing Interstate routes, including the acquisition of right of way. Interstate Maintenance funds can also be used for preventive maintenance if it can be demonstrated that doing so will cost effectively extend bridge and pavement life.

**Bridge Program (BR).** Bridge Program funds are for rehabilitation and replacement of deficient bridges. In addition to standard inspection, maintenance, rehabilitation, and replacement of bridges, bridge program funds can be used for bridge painting and seismic retrofit on deficient bridges. The BR program allows for the installation of bicycle and pedestrian facilities during bridge rehabilitation and replacement projects. A minimum of 15 percent of state BR program funds must be used on local roads, rural minor collectors or off-system bridges. States may increase the share of their Bridge Program funds used on off-system bridges to a maximum of 35 percent. Montana has selected to use 35 percent of its 1995 BR funds for off-system bridges.

**Surface Transportation Program (STP).** The Surface Transportation Program is the largest program funded under ISTEA. Major collectors and above can be improved with Surface Transportation Program funds. A special feature of Montana's system of transportation funding is

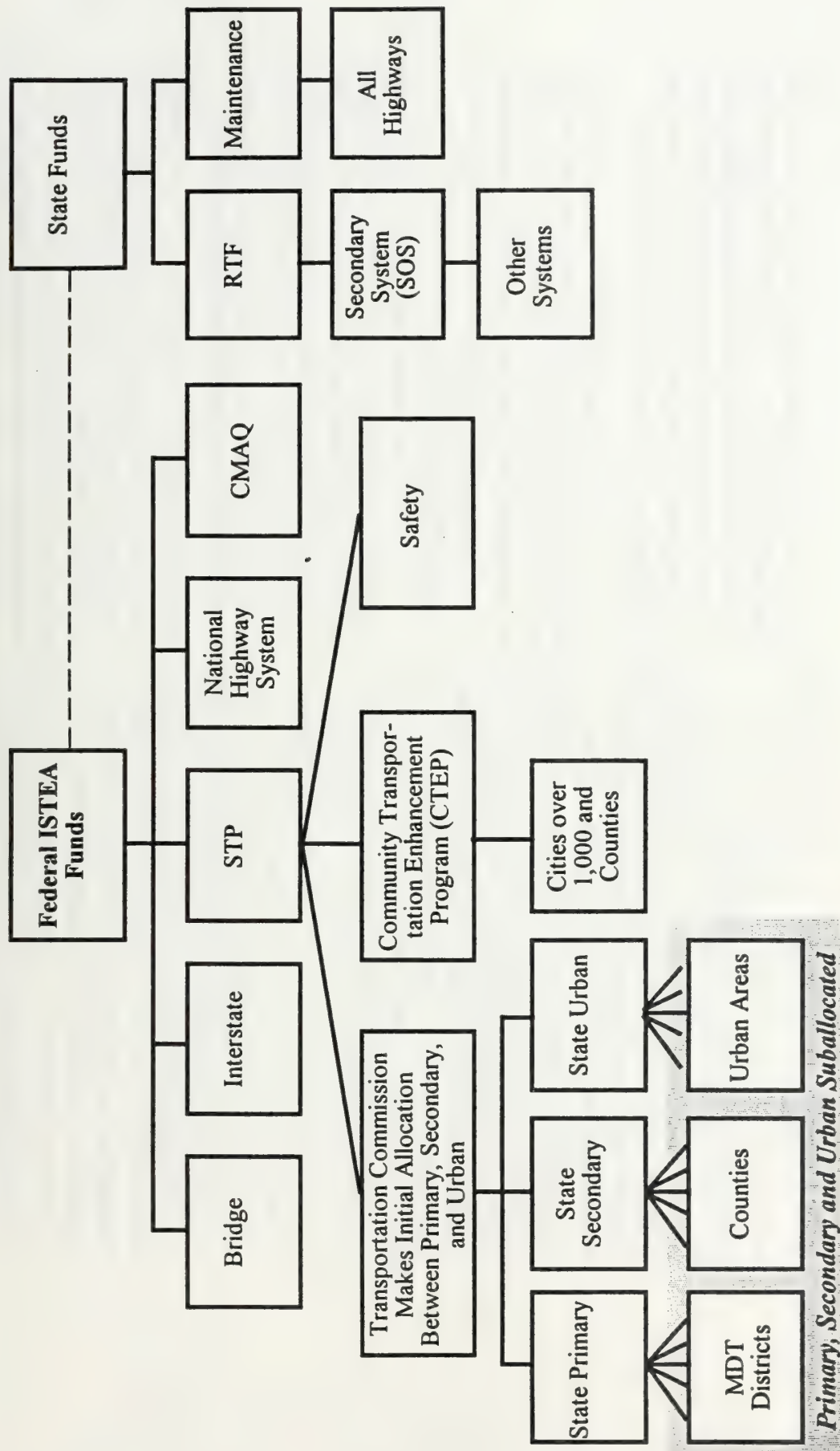
the sub-allocation of STP funds among the three state designated roadway systems. The Montana Highway Commission allocates funds between the following three systems, the suballocation within the systems is established in state law:

- **Primary System:** Montana's Primary System is comprised of rural minor arterials and urban principal and minor arterials not on the proposed NHS. Primary Funds are suballocated to each of five state financial districts for highway improvement and preservation projects. Funds suballocated to the Primary System can only be used on segments of the primary system. The Primary System's 1994 suballocation was \$33.8 million.
- **Secondary System:** Montana's Secondary System includes most rural minor arterials not included on the primary system and many major collectors. Secondary funds are allocated to counties. County Commissioners select projects funded through Secondary System suballocation to their jurisdiction. The Secondary System's suballocation for fiscal year 1994 was \$13.1 million.
- **Urban System:** Montana's Urban System includes most urban principal and minor arterials and some urban collectors located within the urban boundaries of incorporated cities with populations of over 5,000. Cities and counties or Metropolitan Planning Organizations prioritize projects upon which funds allocated to their jurisdictions will be used. The

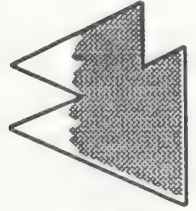




# Exhibit 19: Highway Funds and Programs in Montana



*Primary, Secondary and Urban Suballocated*





Urban Systems suballocation for fiscal year 1994 was \$4.5 million.

Surface Transportation Program funds can also be used for bridges and safety projects on any public road and for bicycle facilities and pedestrian walkways, carpool and vanpool programs, safety improvements and wetland mitigation. Montana plans to fund rural transit by taking funds "off the top" of STP and by allowing urban areas to choose to finance urban transit projects using urban system funds.

**Congestion Mitigation and Air Quality Improvement (CMAQ).** The Congestion Mitigation and Air Quality improvement program, funds projects that contribute to the attainment of federal air quality standards. Montana has used these funds for transit and transit-related projects, pedestrian and bicycle facilities, and other projects aimed at improving air quality in nonattainment areas.

**Safety and Hazard Elimination.** Under ISTEA, Montana must use 10 percent of Surface Transportation Program funds for safety construction and hazard elimination. Montana has used program funds for: signing, no passing zone stripping, installation of flashers and crossing gates, pavement marking, and other projects.

**Transportation Enhancements.** ISTEA requires that Montana use 10 percent of Surface Transportation Program funds for transportation enhancements. Enhancements include a broad range of improvements and activities, including acquisition of scenic and historic sites, landscaping and other scenic beautification, preservation,

rehabilitation and operation of historic transportation structures, buildings, and facilities, preservation of abandoned railway corridors, control and removal of outdoor advertising, archeological planning, and mitigation of water pollution due to highway runoff.

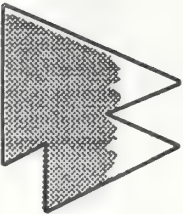
Montana established the Community Transportation Enhancement Program (CTEP) to allocate enhancement funds to cities and counties. Cities over 1,000 population and all counties receive CTEP allocations through a per capita distribution. Local governments must provide a match to their state CTEP allocations.

## Highway System Revenues

Montana relies on federal funding programs and state funding to finance the highway system. These revenues are shown in Exhibit 20. Montana relies upon revenues it collects directly for financing its matching requirements for ISTEA programs, for funding the Reconstruction Trust Fund, maintenance and other operations. Following are the major revenue sources available to implement TranPlan 21:

**Federal Funds.** As discussed above, Montana receives federal funding for ISTEA which was never fully funded. Montana's federal funds for fiscal year 1994 were \$144.6 million.

**Fuel Taxes.** Montana levies a statewide excise gas tax of 27 cents per gallon on gasoline and diesel fuel. By state



law, a significant portion of fuel taxes are diverted to non-highway construction and maintenance uses.

**Gross Vehicle Weight Fees.** Montana levies Gross Vehicle Weight fees upon commercial vehicles using Montana's highways. The fees are based upon the gross weight of commercial vehicle. Montana assesses fees only upon vehicles weighing in excess of 6,000 pounds.

**Accounts Receivable and Other.** This revenue sources include: the state's new vehicle sales tax, revenues from Montana's Coal Tax Trust Fund and miscellaneous accounts receivable, including various permit fees and fines remitted to the Montana Department of Justice.

## The Reconstruction Trust Fund (RTF)

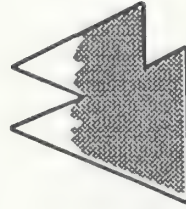
The Reconstruction Trust Fund is a highway preservation program wholly funded with revenues directly collected by Montana. The federal government plays no role in funding the Reconstruction Trust Fund. For fiscal year 1994, Montana earmarked \$20.0 million for the Reconstruction Trust Fund. This represents a decline from the 1991 funding level of \$48 million. The decline in RTF spending is mainly due to the exhaustion of proceeds derived from bonds Montana sold during the 1980s for the purpose of highway system preservation.

The Reconstruction Trust Fund is a major source of funding for preservation projects on Montana's Secondary

## Exhibit 20: Highway Improvement and Maintenance Allocation, Fiscal Year 1994 (\$ in Millions)

	Federal	State
ISTEA:		
Interstate	42.4	
National Highway System	36.0	
Bridge Program	9.95	
Surface Transportation Program	51.4	
Non-NHS Primary	33.8	
Secondary	13.1	
Urban	4.5	
CMAQ	4.8	
Safety and Hazard Elimination	5.4	
Transportation Enhancements	5.4	
ISTEA Total	144.6	
State Funded: Match @ 87%	18.8	
Reconstruction Trust Fund	20.0	
Maintenance	59.4	
State Total	98.2	

Source: Montana Department of Transportation 1994 Fund Allocation Plan





Highway System. Over 75 percent (\$15.65 million) of Montana's 1995 Reconstruction Trust Fund budget is earmarked for Secondary System preservation.

## Maintenance Program

The state is responsible for the maintenance of just over 8,000 center line miles of roadway. The maintenance program includes: plowing and sanding, patching and sealing, and roadside maintenance. The program is funded entirely through state funds. Maintenance is not eligible for federal funding. For fiscal year 94 just under \$60.0 million was budgeted for maintenance.

## Transit Finance

Montana state government plays a role in the following two federal transit programs: Firstly, the Section 5310 (formerly Section 16) program, which provides funding for transportation for the elderly and persons with disabilities, and secondly, the Section 5211 (formerly Section 18) program, which funds transit in small cities and rural areas. Under both programs, Montana applies for annual grants from the Federal Transit Administration and allocates grant receipts amongst local transit providers based upon need and the availability of local matching funds.

Urban transit providers in Billings, Missoula, and Great Falls receive transit funding under the Section 5307 (formerly Section 9) urban transit block grant program

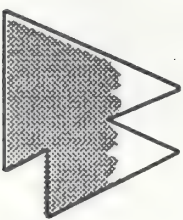
directly from the Federal Transit Administration. State government has no direct involvement in the Section 5307 program.

**Elderly and Disabled Transit.** Local transit providers eligible for Section 5310 funds (formerly section 16) include city and county governments, local transit authorities, nursing homes, hospitals, and local and regional Agencies- and Councils on Aging. The Federal Transit Administration (FTA) will pay a maximum of 70 percent of eligible project costs under a Section 5310 program grant. Local transit providers must provide the remaining 30 percent.

In a typical year, Montana receives about 35 to 45 applications from local transit providers for funding under the Section 5310 program. Typically, assistance can be provided to only about one third of the grant applicants.

In 1994, Section 5310 funding in Montana totalled \$383,976. The FTA paid \$268,783 of this total, and the state, \$11,519. Local transit operators provided the remaining \$103,674.

**Rural and Small City Transit.** The Section 5311 (formerly Section 18) program provides federal funds for the purpose of providing transportation services in nonurbanized areas under 50,000 population. Under Section 5311, the Federal Transit Administration will pay a maximum of 70 percent of project capital and administrative costs and a maximum of 50 percent of transit system operating deficit costs.





In 1994, Section 5311 funding in Montana totalled \$1,099,744. The FTA paid \$646,086 of this total and the state, \$24,265, primarily for intercity transit service. Local transit providers paid \$429,393.

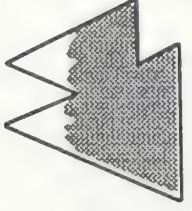
**Aeronautics Funding.** Montana operates loan and grant programs to assist airport owners and operators in financing airport development and improvement projects. Any state agency and any city, town, county, or other political subdivision of the state which operates an airport open to the public on a nondiscriminatory basis is eligible for assistance under the loan and grant programs. Grant amounts are limited to 50 percent of the sponsor's share of airport project costs. Loans can be for up to 100 percent of project costs. Loan rates are fixed at 1/2 of the Prime Rate and loan payback periods of up to 10 years are allowed.

The grant and loan programs are financed with a three cent per gallon tax on aviation fuel sold in Montana. By statute, one cent of the tax on each gallon of jet fuel sold is dedicated to grants and one cent to loans. The remaining cent is used to finance administrative and mandated functions, including pilot and airplane registration. Montana estimates the jet fuel tax will generate about \$170,000 annually for the loan and grant programs.

**Rail Programs.** Montana has an extremely limited ability to fund rail freight projects under the provisions of the Railroad Revitalization and Regulatory Reform Act of 1976. The Act authorizes the Local Rail Freight Assistance Program (LRFA), which provides funding on a federal/local matching share basis for rail planning and rail service

assistance projects. To be eligible for funding under LRFA, a project must be documented in a current state rail plan and meet a variety of requirements that limit projects to branch lines. Under LRFA, the federal government will pay 50 percent of acquisition and construction costs and 70 percent of rehabilitation project costs. Eligibility is restricted to branch lines. The balance of project costs must be provided from other sources.

Under LRFA, each eligible state is allocated statutory entitlement funds on an annual basis. States can also compete for discretionary project funds. The 1994 U.S. Department of Transportation Appropriations Act included \$17 million for the LRFA program. Montana received \$36,000 for planning. Montana did not apply for any discretionary funding due to a lack of committed projects.



# Financial Considerations

The progress which Montana makes towards its preferred transportation future will be affected by the funding levels. The key financial considerations that will need to be addressed as TranPlan 21 is implemented are described.

## Revenue sufficiency

The most significant constraint affecting the future performance of the state's transportation system will be the increasing shortfall between revenues and improvement and preservation needs on the state's highway system. The state's funding mechanisms do not increase with inflation and they decline in real terms. Therefore, just to keep up Montana will need to increase revenues. Failure to close the funding gap could result in an inability to make needed highway system improvements and inadequate preservation and maintenance.

## Uncertainty of future federal funding

Montana relies heavily upon federal revenues to fund its highway improvement needs. Continued funding at current levels is uncertain. This uncertainty stems from the possibility that The Congress may not fund the transportation program at levels that increase with inflation in future years, and may divert federal gas tax revenues that finance federal highway programs to other uses. This could diminish federal transportation payments to Montana. Another

source of uncertainty stems from possible increases in the matching requirements that accompany federal transportation assistance.

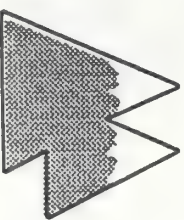
## Need to meet federal match requirements

Forecasts for 1995 show that Montana will receive \$6.7 federal dollars for every dollar of state revenues. The state must ensure that it can continue to meet the matching requirements that accompany federal transportation assistance. Federal transportation aid programs operate on a reimbursement basis. Montana must fund construction projects it undertakes with federal assistance first and then wait reimbursement from the federal government. This means that Montana must not only ensure that it has sufficient revenues to meet the costs of the transportation projects it undertakes, but must also maintain a reserve fund adequate to meet federal advanced funding requirements.

## Need to finance secondary system needs

Montana's ability to finance the preservation of the state's secondary highways is a key concern for implementing TranPlan 21. Federal funds are distributed over many secondary system miles. Montana supplements federal funding with state funds.

In the 1980s, MDT issued bonds to finance secondary system preservation. Bond proceeds have now been exhausted, and revenues from this source are no longer available. While Montana continues to fund preservation of secondary highways out of current revenues, the level of





funding for secondaries is now only half of peak funding level of past years, while secondary system needs remain fairly constant.

### Local transportation financing

The twenty year life of TranPlan 21 will see many of Montana's local governments face a need for increased transportation revenues. By law, Montana's cities and counties receive a share of the state's fuel tax collections for use in meeting their transportation needs. In fiscal year 1995, cities and counties will receive \$16.8 million in fuel tax revenues.

Cities and counties also draw upon other revenue sources in meeting their transportation needs, including property taxes and motor vehicle registration fees. Under state law, counties have the option of levying a gas tax of up to two cents per gallon to raise revenues for roadway uses. Currently, no county has chosen to enact an optional gas tax. However, the option is available, and counties could make use of the gas tax option in seeking to meet their future roadway revenue needs.

## Transportation Finance Alternatives

Over the next twenty years Montana will have to consider increasing revenues to maintain the buying power of transportation funds and meet future needs. The finance

alternatives available which would all require legislative authorization are as follows.

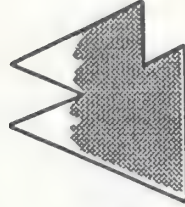
### Using current finance mechanisms

Montana increases fuel taxes periodically and they provide a strong link between using the system and paying for the preservation of the system. The state motor vehicle fuel tax provides Montana with its most likely approach to increasing highway revenues in coming years.

Montana could also seek to raise revenues for highway improvement and preservation by raising the gross vehicle weight fees levied on motor vehicles. Any increase should be consistent with the principal of cost responsibility, and be based on an update of the cost allocation study upon which the state's last revision of fees in 1994 was based.

### Fuel tax indexing

A major challenge for transportation finance is that every increase in gas tax appears as a tax increase, when in most cases the increases are merely keeping revenues in pace with inflation. To overcome this, and stabilize funding over the long term, Montana could index its fuel tax rates to rise with inflation. To index fuel taxes, they could be set at a percentage of fuel prices, or linked to changes in the consumer price index or the construction price index. Indexing would ensure that fuel tax revenues keep pace with inflationary increases in highway construction costs.





## Bonded debt

Bonds can be used to manage cash flow - they are not a revenue source. In the 1980s, Montana sold bonds to generate revenues to finance the Reconstruction Trust Fund. Montana could again seek to use bonds to raise capital to meet its future transportation finance needs.

A key issue in any decision on the future use of bonded debt is the degree to which revenues are projected to be sufficient to allow Montana to pay off debt principal and interest. Projections indicate that Montana will incur an annual expense of about \$16 million well into the next decade to pay off interest and principal on the bonds it sold during the 1980s.

## Statewide motor vehicle registration or vehicle licensing fees

Currently, counties in Montana generate revenues for roadway improvements by assessing licensing fees upon county resident owned vehicles. However, there is no state licensing or registration fee at the current time. Montana could seek to raise revenues for roadway improvement and preservation by establishing statewide motor vehicle registration or vehicle license fees.

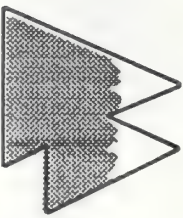
## Road pricing

Road pricing involves assessing tolls upon users of roadways. Tolls are usually set at a level necessary to generate revenues needed to pay off bonds sold to provide initial roadway construction. Toll revenues can also be used for roadway maintenance and preservation.

One form of road pricing is called congestion pricing. Congestion pricing involves assessing tolls on roadways during congested periods. By charging for roadway use during congested periods, congestion pricing aims to deter travellers who do not value peak hour travel highly enough to pay a charge and alleviate congestion. Congestion pricing also seeks to raise revenues which can be used to make transportation improvements aimed at alleviating congestion.

Road pricing can also be enacted through public private partnerships. Partnerships involve private investors in building and maintaining roadways. Roadway users are charged a toll for the purpose of retiring roadway construction costs and paying for roadway maintenance and for providing a measured operating profit to private investors.

The possibility of road pricing in Montana in the near term must be ruled out. Road pricing generally requires high traffic volumes in order to generate revenues sufficient to recover project costs. Few, if any roadway corridors in Montana are likely to generate the necessary traffic volumes.



# Further Reference

This volume has presented an overview of TranPlan 21. As part of the plan a number of other volumes have been prepared, many of which provide the analytical basis for the conclusions presented in this document. The contents of the volumes available for further reference are listed below.

## Volume II: Transportation System Analysis

- I. Introduction
- II. Economic, Environmental, and Social Considerations
- III. Transportation System Designation
- IV. Transportation System Analysis
- V. Finance Analysis

## Volume III: TranPlan 21 Policy Papers

- Economic Development
- Freight Mobility
- Roadway System Performance
- Access Management and Land Use

## Public Transportation

### Bicycle and Pedestrian Transportation

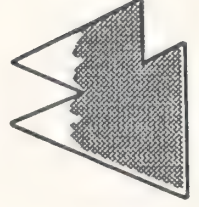
## Volume IV: Citizen and Stakeholder Issues and Priorities

- I. Issue Identification Results
- II. Public Comments on Plan Alternatives and Policy Choices
- III. Public Opinion Survey Results

## Technical Appendix

- Travel Modeling Documentation
- Travel Modeling Forecast Results
- Telephone Survey Instrument
- Socioeconomic Data

If you would like to receive copies of any of these volumes or to be placed on the TranPlan 21 mailing list please contact John D. Craig, Chief of the Multimodal Planning Bureau, Montana Department of Transportation (MDT) at 444-6370 or call the MDT hotline at 800-714-7296.

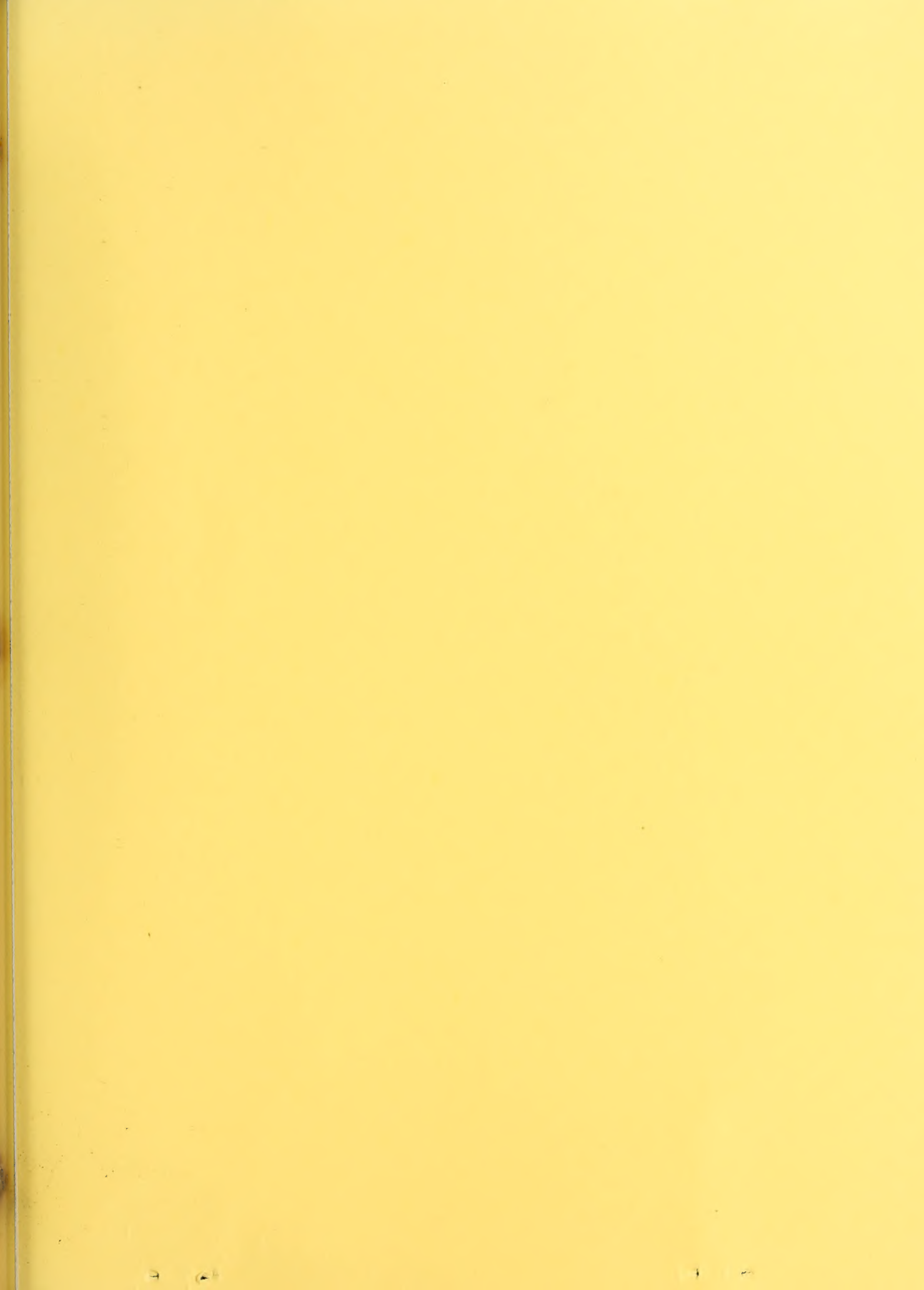


Montana Department of Transportation

TranPlan 21







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